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NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS	3	AUG 06	FSTA enhanced with new thesaurus edition
NEWS	4	AUG 13	CA/Caplus enhanced with additional kind codes for granted patents
NEWS	5	AUG 20	CA/Caplus enhanced with CAS indexing in pre-1907 records
NEWS	6	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS	7	AUG 27	USPATOLD now available on STN
NEWS	8	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS	9	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS	10	SEP 13	FORIS renamed to SOPIS
NEWS	11	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS	12	SEP 17	CA/Caplus enhanced with printed CA page images from 1967-1998
NEWS	13	SEP 17	Caplus coverage extended to include traditional medicine patents
NEWS	14	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	15	OCT 02	CA/Caplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	16	OCT 19	BEILSTEIN updated with new compounds
NEWS	17	NOV 15	Derwent Indian patent publication number format enhanced
NEWS	18	NOV 19	WPIX enhanced with XML display format
NEWS	19	NOV 30	ICSD reloaded with enhancements
NEWS	20	DEC 04	LINPADOCDB now available on STN
NEWS	21	DEC 14	BEILSTEIN pricing structure to change
NEWS	22	DEC 17	USPATOLD added to additional database clusters
NEWS	23	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS	24	DEC 17	DGENE now includes more than 10 million sequences
NEWS	25	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS	26	DEC 17	MEDLINE and LEMEDLINE updated with 2008 MeSH vocabulary
NEWS	27	DEC 17	CA/Caplus enhanced with new custom IPC display formats
NEWS	28	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS	29	JAN 02	STN pricing information for 2008 now available
NEWS	30	JAN 16	CAS patent coverage enhanced to include exemplified

prophetic substances  
 NEWS 31 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new  
 custom IPC display formats  
 NEWS 32 JAN 28 MARPAT searching enhanced  
 NEWS 33 JAN 28 USGENE now provides USPTO sequence data within 3 days  
 of publication  
 NEWS 34 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment  
 NEWS 35 JAN 28 MEDLINE and LMEEDLINE reloaded with enhancements  
 NEWS 36 FEB 08 STN Express, Version 8.3, now available

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,  
 AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2008

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\* \* \* \* \* STN Columbus \* \* \* \* \*

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 DICTIONARY FILE UPDATES: 18 FEB 2008 HIGHEST RN 1004360-55-7

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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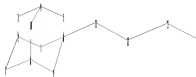
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=>

Uploading C:\Program Files\Stnexp\Queries\10540547\Struc 1.str



chain nodes :

11 12 13 14

ring nodes :

1 2 3 4 5 6 7 8 9 10

chain bonds :

6-11 11-12 12-13 13-14

ring bonds :

1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10

exact/norm bonds :

1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10 11-12 12-13

exact bonds :

6-11 13-14

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

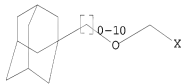
11:CLASS 12:CLASS 13:CLASS 14:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> l1

SAMPLE SEARCH INITIATED 15:46:08 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 82 TO ITERATE

100.0% PROCESSED 82 ITERATIONS

4 ANSWERS

SEARCH TIME: 00.00.01

10540547.trn

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 1097 TO 2183  
 PROJECTED ANSWERS: 4 TO 200

L2 4 SEA SSS SAM L1

=> l1 full  
 FULL SEARCH INITIATED 15:46:12 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 1594 TO ITERATE

100.0% PROCESSED 1594 ITERATIONS 36 ANSWERS  
 SEARCH TIME: 00.00.01

L3 36 SEA SSS FUL L1

=> file caplus  
 COST IN U.S. DOLLARS SINCE FILE TOTAL  
 ENTRY SESSION  
 FULL ESTIMATED COST 178.36 178.57

FILE 'CAPLUS' ENTERED AT 15:46:16 ON 19 FEB 2008  
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=> l3  
 L4 163 L3

=> d scan

L4 163 ANSWERS CAPLUS COPYRIGHT 2008 ACS on STN  
 CC 25-7 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)  
 TI 1-Adamantylloxycarbonyl: a novel protecting group for phenols carrying strongly electron-withdrawing substituents  
 ST adamantylloxycarbonyl protective group phenol  
 IT Protective groups



(adamantylloxy)carbonyl, for phenols with electron-withdrawing substituents)

IT 100-02-7, 4-Nitrophenol, reactions 367-27-1, 2,4-Difluorophenol  
 394-41-2, 3-Fluoro-4-nitrophenol 403-19-0, 2-Fluoro-4-nitrophenol  
 769-39-1, 2,3,5,6-Tetrafluorophenol 771-61-9, 2,3,4,5,6-  
 Pentafluorophenol 2713-31-7, 2,5-Difluorophenol 6418-38-8,  
 2,3-Difluorophenol 20994-04-1, 2,3,5,6-Tetrafluoro-4-nitrophenol  
 28177-48-2, 2,6-Difluorophenol 82419-26-9, 2,3-Difluoro-6-nitrophenol  
 139548-97-3, 2,5-Difluoro-6-nitrophenol  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (condensation of, with adamantyl fluoroformate)

IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (condensation of, with phenols)

IT 156639-25-7 156639-26-8 156639-27-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (deprotection of)

IT 156639-13-3P 156639-14-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and hydrogenation of)

IT 5854-73-9P 156639-15-5P 156639-16-6P 156639-17-7P 156639-18-8P  
 156639-19-9P 156639-20-2P 156639-21-3P 156639-22-4P 156639-23-5P  
 156639-24-6P 156639-28-0P 156639-29-1P 156639-30-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

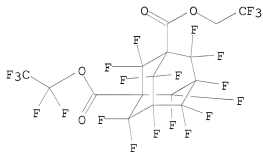
=> d ibib abs hitstr 1-163

L4 ANSWER 1 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:1466873 CAPLUS  
 DOCUMENT NUMBER: 148:78669  
 TITLE: Preparation of fluoroadamantane derivatives  
 INVENTOR(S): O, Josho; Murata, Koichi; Seki, Takashi; Shimizu,  
 Tamaki; Yamashita, Koken  
 PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 17pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----		-----	-----	-----
JP 2007332068	A	20071227	JP 2006-164865	20060614
PRIORITY APPLN. INFO.:			JP 2006-164865	20060614
OTHER SOURCE(S):	MARPAT 148:78669			
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

- AB Adamantane derivs. I (G = halo, OH; J = H, COG; RFA, RFB = Cl-20 perfluoroalkyl optionally containing etheric O) are reacted with (RFACO)<sub>2</sub>O (RFA = same as above) and then (2) reacted with RFBCH<sub>2</sub>OH (RFB = same as above) to give title derivs. II (RFA, RFB = same as above; T = H if J in I is H; T = CO<sub>2</sub>CH<sub>2</sub>RFB if J in I is COG). Another derivs. III (Q = CHF, CF<sub>2</sub>; R = H, Cl-10 hydrocarbyl; X = H, CHROH if Y = H; X = F or OH if Y = F or OH, resp.) are prepared by (1) reacting IV (Q = same as above; Z1 = H, F, OH, COF) with protonic nucleophiles and (2) reacting the resulting V (Q = same as above; Y = Y = H, F, or OH if Z1 = H, F, or OH, resp.; Y = H if Z1 = COF) with RCHO (R = same as above) in the presence of basic compds. Introduction of polymerizable group to III gives monomers, useful for manufacture of polymers which show good heat resistance, mold-release property, chemical resistance, transparency, light resistance, etc., and are useful as optical fibers, pellicles, lenses, display surface protective films, etc. Thus, (CF<sub>3</sub>CO)<sub>2</sub>O was added dropwise to I (G = OH, J = H) under cooling over 10 min and the reaction mixture was stirred at 25° for 4 h. CF<sub>3</sub>CH<sub>2</sub>OH was added dropwise to the reaction mixture under cooling with ice over 2 h and the mixture was stirred at 25° for 3 days to give II (T = H, RFA = RFB = CF<sub>3</sub>), VI, and VII with yields 14.25, 83.7, and 1.6%, resp. The product mixture was completely fluorinated and decomposed in the presence of KF to give IV (Q = CF<sub>2</sub>, Z1 = F), which was treated with NaF in acetone at 25° for 12 h and the resulting V (Q = CF<sub>2</sub>, Y = F) was treated with formalin in Me<sub>2</sub>SO/KOH solution at 70° for 10 h to give III (Q = CF<sub>2</sub>, X = F, R = H).
- IT 960511-28-8P  
 RL: BYP (Byproduct); PREP (Preparation)  
 (preparation of hydroxy(1-hydroxyalkyl)fluoroadamantanes from (carboxy or halocarbonyl)adamantanes and intermediates in preparation)
- RN 960511-28-8 CAPLUS
- CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1,3-dicarboxylic acid,  
 2,2,4,4,5,6,6,7,8,8,9,9,10,10-tetradecafluoro-, 1-(1,1,2,2,2-pentafluoroethyl) 3-(2,2,2-trifluoroethyl) ester (CA INDEX NAME)



L4 ANSWER 2 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1454513 CAPLUS

DOCUMENT NUMBER: 148:79321

TITLE: Preparation of hydroxyproline oxime ether-containing peptide analogs as hepatitis C virus (HCV) NS3-NS4A protease inhibitors

INVENTOR(S): Or, Yat Sun; Sun, Ying; Wang, Zhe

PATENT ASSIGNEE(S): Enanta Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 190pp.

DOCUMENT TYPE: CODEN: PIXXD2  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: 2 English  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007/146695	A1	20071221	WO 2007-US70481	20070606
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRIORITY APPLN. INFO.:			US 2006-811464P	P 20060606
			US 2006-503385	A 20060811
OTHER SOURCE(S):	MARPAT 148:79321			
GI				

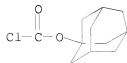
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. [I; R1, R2 = H, (substituted) aryl, heteroaryl, heterocyclyl, alkyl, cycloalkyl, cycloalkenyl, etc.; R1R2C = atoms to form (substituted) cycloalkyl, cycloalkenyl, heterocyclyl; m, p = 0-3; n = 1-3; G = ER3; E = null, O, CO, CO2, CONH, NH, NHCONH, NHSO2NH, NHSO2; R3 = H, (substituted) aryl, heteroaryl, heterocyclyl, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl; A = R5, COR5, CONHR5, SO2R5, etc.; R5 = (substituted) aryl, heteroaryl, heterocyclyl, alkyl, cycloalkyl; B = H, Me; L, Z = H, (substituted) aryl, heteroaryl, heterocyclyl, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl], were prepared. Thus, title compound (II) (solution phase preparation given) and other I inhibited HCV NS3 proteases with IC50 values in the range of <0.2 nM to about 50 nM.

IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of hydroxyproline oxime ether-containing peptide analogs as hepatitis C NS3-NS4A protease inhibitors)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

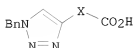


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:1374788 CAPLUS  
 TITLE: Cu(I)-Catalyzed Intramolecular Cyclization of Alkynoic Acids in Aqueous Media: A "Click Side Reaction"  
 AUTHOR(S): Mindt, Thomas L.; Schibli, Roger  
 CORPORATE SOURCE: Department of Chemistry and Applied Biosciences, ETH Zurich, Zurich, 8093, Switz.  
 SOURCE: Journal of Organic Chemistry (2007), 72(26), 10247-10250  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

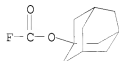


I



II

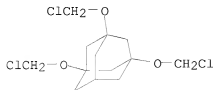
AB Alkynoic acids, in particular, 4-pentynoic acid derivs., undergo intramol. cyclizations to enol lactones under reaction conditions typically applied for the Cu(I)-catalyzed cycloaddn. of terminal alkynes and azides (click chemical). Starting from appropriate alkynoic acid derivs., e.g., HC.tplbond.C(CH2)nCO2H (n = 0, 1, 2, 3, 4), either enol lactones, e.g., I, or 1,2,3-triazole click products, e.g., II [X = (CH2)n, n = 0, 1, 3, 4], can be obtained selectively by Cu(I) catalysis in aqueous media.  
 IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (copper-catalyzed cyclization of alkynoic acids including propargyl glycine derivs. in water to give 1,2,3-triazoles as click reaction product or selectively prepared enol lactones)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:935060 CAPLUS  
 DOCUMENT NUMBER: 147:288278  
 TITLE: Preparation of adamantane based molecular glass photoresists for sub-200 nm immersion lithography  
 INVENTOR(S): Tanaka, Shinji; Ober, Christopher K.  
 PATENT ASSIGNEE(S): Cornell Research Foundation, Inc., USA; Idemitsu Kosan Co., Ltd.  
 SOURCE: PCT Int. Appl., 41pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007094784	A1	20070823	WO 2006-US5378	20060216
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW</p> <p>RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p>				
PRIORITY APPLN. INFO.:			WO 2006-US5378	20060216
<p>AB Disclosed are glass photoresists generated from adamantane derivs. containing acetal and/or ester moieties as novel high-performance photoresist materials. Some of the disclosed adamantane-based glass resists have a tripodal structure and other disclosed adamantane-based glass resists include one or more cholic groups. The disclosed adamantane derivs. can be synthesized from starting materials which are com. available. By way of example only, one of many disclosed amorphous glass photoresists has the following structure: GR-5 Adamantane-1,3,5-triyltris(oxyethylene) tricholate.</p>				
<p>IT 946578-92-3        RL: RCT (Reactant); RACT (Reactant or reagent)        (preparation of adamantane based mol. glass photoresist for immersion lithog.)</p>				
<p>RN 946578-92-3 CAPLUS</p>				
<p>CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1,3,5-tris(chloromethoxy)- (CA INDEX NAME)</p>				

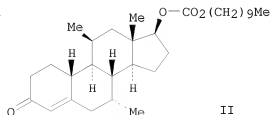
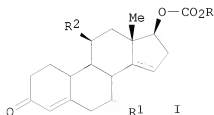


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

## RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:795713 CAPLUS  
 DOCUMENT NUMBER: 145:211220  
 TITLE: Preparation of nandrolone 17 $\beta$ -carbonates as androgenic agents  
 INVENTOR(S): Blye, Richard P.; Kim, Hyun K.  
 PATENT ASSIGNEE(S): Government of the United States of America, Represented by the Secretary, Department of Health and Human Services, USA  
 SOURCE: PCT Int. Appl., 55pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006083618	A1	20060810	WO 2006-US2436	20060124
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM AU 2006211907 A1 20060810 AU 2006-211907 20060124 CA 2596884 A1 20060810 CA 2006-2596884 20060124 EP 1846434 A1 20071024 EP 2006-719336 20060124 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR PRIORITY APPLN. INFO.: US 2005-650376P P 20050204 WO 2006-US2436 W 20060124 OTHER SOURCE(S): MARPAT 145:211220 GI				

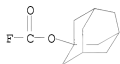


AB Nortestosterone carbonates of formula I [R = (substituted) alkyl, (substituted) cycloalkyl; R1 = H, alkyl; R2 = alkyl, halo] are prep.d.as androgenic agents. Also disclosed are pharmaceutical compns. comprising such compds. and methods of use thereof. These compds. can find use in treating a number of diseases or conditions such as hypogonadism, hypergonadism, osteoporosis, and anemia, in providing hormonal therapy and contraception, as an anabolic agent, and in suppressing the release of hormones such as the LH. Thus, II was prepared, and showed 5 to 9 times the oral activity of methyltestosterone.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of nandrolone 17 $\beta$ -carbonates as androgenic agents)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:358243 CAPLUS  
 Correction of: 2005:481370

DOCUMENT NUMBER: 145:123920  
 Correction of: 143:26020

TITLE: Carbonic acid halides

AUTHOR(S): Senet, J.-P. G.

CORPORATE SOURCE: Science, Chemicals, SNPE Group, Le Bouchet Research Center, Vert-le-Petit, 91710, Fr.

SOURCE: Science of Synthesis (2005), 18, 321-377  
 CODEN: SSCYJ9

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

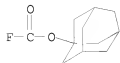
AB A review of preparation of carbonic acid halides including carbonic dihalides, haloformate esters, chlorothioformate S-esters, haloselenoformic Se-acids, carbamoyl halides, and P-halocarbonyl organophosphorous compds.

IT 62087-82-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of carbonic acid halides)

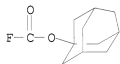
RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 7 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:340874 CAPLUS  
 DOCUMENT NUMBER: 144:373071  
 TITLE: Odorant-containing liquid fuel for fuel cell  
 INVENTOR(S): Arimura, Tomoaki  
 PATENT ASSIGNEE(S): Japan  
 SOURCE: U.S. Pat. Appl. Publ., 9 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006078767	A1	20060413	US 2005-220502	20050907
JP 2006100141	A	20060413	JP 2004-285454	20040929
PRIORITY APPLN. INFO.:			JP 2004-285454	A 20040929
AB	An odorant having a high odor diffusing rate, a high tolerable factor of dilution and a low percent adsorption is provided and has a pyridine derivative and a steric compound A liquid fuel for a fuel cell and a fuel cell are provided and each has the odorant.			
IT	62087-82-5			
RL:	MOA (Modifier or additive use); USES (Uses) (odorant-containing liquid fuel for fuel cell)			
RN	62087-82-5 CAPLUS			
CN	Carbonofluoridic acid, tricyclo[3.3.1.1 <sup>3,7</sup> ]dec-1-yl ester (CA INDEX NAME)			



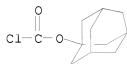
L4 ANSWER 8 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:298199 CAPLUS  
 DOCUMENT NUMBER: 144:350970  
 TITLE: Cost-effective preparation of theanine without extraction from green tea leaves  
 INVENTOR(S): Okada, Yukitaka; Koseki, Makoto; Aoi, Nobuyuki  
 PATENT ASSIGNEE(S): Taiyo Kagaku Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006083155	A	20060330	JP 2005-46543	20050223
PRIORITY APPLN. INFO.:			JP 2004-237825	A 20040818
AB	Theanine, useful as a food additive (no data), is prepared via glutamic			



acids having adamantyloxycarbonyl-protected  $\alpha$ -amino group. Thus, glutamic acid was protected with isobutylene in the presence of concentrate  $H_2SO_4$ , protected with adamantyloxycarbonyl chloride in the presence of NaOH, treated with  $EtNH_2.HCl$  in the presence of DCC, and deprotected with  $CF_3CO_2H$  to give L-theanine.

IT 5854-52-4, Adamantyloxycarbonyl chloride  
 RL: RGT (Reagent); RACT (Reactant or reagent)  
 (preparation of theanine as food additive via glutamic acids having adamantyloxycarbonyl-protected  $\alpha$ -amino group)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 9 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:101708 CAPLUS  
 DOCUMENT NUMBER: 144:193289  
 TITLE: Fluorine-containing polymers with good transparency for resist compositions and resist protective film compositions  
 INVENTOR(S): Takebe, Yoko; Eda, Masataka; Yokokoji, Osamu; Sasaki, Takashi  
 PATENT ASSIGNEE(S): Asahi Glass Company, Limited, Japan  
 SOURCE: PCT Int. Appl., 72 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006011427	A1	20060202	WO 2005-JP13507	20050722
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
EP 1772468	A1	20070411	EP 2005-766146	20050722
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR			
CN 1993393	A	20070704	CN 2005-80025573	20050722
US 2007154844	A1	20070705	US 2007-626913	20070125

KR 2007038533	A	20070410	KR 2007-702233	20070129
PRIORITY APPLN. INFO.:			JP 2004-223363	A 20040730
			JP 2004-340595	A 20041125
			JP 2005-151028	A 20050524
			WO 2005-JP13507	W 20050722

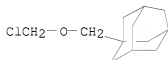
AB Title polymers are obtained by ring-forming polymerization of a fluorine-containing diene CF<sub>2</sub>:CFCF<sub>2</sub>C(CF<sub>3</sub>)(OR<sub>1</sub>)(CH<sub>2</sub>)<sub>n</sub>CR<sub>2</sub>:CHR<sub>3</sub>, wherein R<sub>1</sub> = H, C≤20 alkyl, or (CH<sub>2</sub>)<sub>a</sub>COOR<sub>4</sub>; R<sub>2</sub>, R<sub>3</sub> = independently H or C≤12 alkyl; R<sub>4</sub> = H or C≤20 alkyl; a = 0 or 1; and n = 0 or 2 (when n = 0, ≥1 of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> ≠ H). Thus, 254 g 68% 4,5-dichloro-1,1,3,3,4,5,5-octafluoro-2-pentanone solution was mixed with 1 M vinylmagnesium bromide at 0° for 60 min and at room temperature for 16 h, 234 g of the resulting 5,6-dichloro-4,4,5,6,6-pentafluoro-3-(trifluoromethyl)-1-hexen-3-ol was mixed with 47 g zinc and stirred, 20 g zinc was added therein and stirred for 36 h to give 4,4,5,6,6-pentafluoro-3-(trifluoromethyl)-1,5-hexadien-3-ol, 4.50 g of which was polymerized in the presence of 9.02 g 3% perfluorobutyl peroxide at 20° for 18 h to give a cyclized fluoropolymer with weight average mol. weight 18,200, polydispersity 2.19, and glass transition temperature 86°, 1 g of the resulting polymer was dissolved in 10 g 2-heptanone, filtered, applied on a silicon wafer, and dried at 100° for 90 s to give a resist protective coating, showing light transmittance 99.3% at 193 nm and 79.4% at 157 nm.

IT 720682-48-4DP, reaction products with hydroxy-containing cyclic fluoropolymers

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(fluorine-containing polymers with good transparency for resist comps. and resist protective film comps.)

RN 720682-48-4 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1314037 CAPLUS

DOCUMENT NUMBER: 144:52079

TITLE: Photoresists comprising polymers derived from fluoroalcohol-substituted polycyclic monomers

INVENTOR(S): Crawford, Michael Karl; Tran, Hoang Vi; Schadt, Frank L., III; Zumsteg, Frederick Claus, Jr.; Feiring, Andrew Edward; Fryd, Michael

PATENT ASSIGNEE(S): E.I. DuPont De Nemours and Company, USA

SOURCE: PCT Int. Appl., 57 pp.  
CODEN: PIXXD2

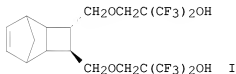
DOCUMENT TYPE: Patent

LANGUAGE: English

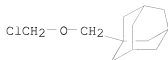
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005118656	A2	20051215	WO 2005-US17325	20050517
WO 2005118656	A3	20060112		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2007207413	A1	20070906	US 2006-578278	20061011
PRIORITY APPLN. INFO.:			US 2004-572734P	P 20040520
OTHER SOURCE(S):			WO 2005-US17325	W 20050517
GI			MARPAT 144:52079	



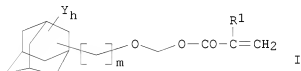
- AB The invention relates to unsatd. polycyclic compds. containing two fluoroalc. substituents. The invention also relates to homopolymers and copolymers derived from such unsatd. polycyclic compds. The copolymers are useful for photoimaging compns. and, in particular, photoresist compns. (pos.-working and/or neg.-working) for imaging in the production of semiconductor devices. The polymers are especially useful in photoresist compns. having high UV transparency (particularly at short wavelengths, e.g., 157 nm) which are useful as base resins in resists and potentially in many other applications. A typical polymer was manufactured by radical polymerization of 67.5 g fluorodiol I with 30 g tetrafluoroethylene in 1,1,3,3-pentafluorobutane.
- IT 720682-48-4DP, reaction products with polymers based on polycyclic monomers having 2 fluoroalc. groups  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (photoresists comprising polymers derived from polycyclic monomers having 2 fluoroalc. groups)
- RN 720682-48-4 CAPLUS
- CN Tricyclo[3.3.1.1.3]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



L4 ANSWER 11 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:1241028 CAPLUS  
 DOCUMENT NUMBER: 143:485833  
 TITLE: Adamantane derivative, method for producing same and photosensitive material for photoresist  
 INVENTOR(S): Ito, Katsuki; Ono, Hidetoshi; Tanaka, Shinji; Hatakeyama, Naoyoshi; Miyamoto, Shinji; Matsumoto, Nobuaki  
 PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005111097	A1	20051124	WO 2005-JP8943	20050517
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: JP 2004-147946 A 20040518  
 OTHER SOURCE(S): MARPAT 143:485833  
 GI



AB Disclosed is an adamantane derivative which is useful as a monomer for a functional resin such as a photosensitive resin that is used in the fields of photolithog. Also disclosed are a method for efficiently producing such an adamantane derivative and a photosensitive material for photoresists containing a polymer obtained from such an adamantane derivative Specifically

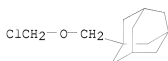
disclosed is an adamantane derivative which is characterized by having a structure represented by the following general formula I wherein R1 represents a hydrogen atom, a Me group or a trifluoromethyl group; Y represents an alkyl group having 1-10 carbon atoms, a halogen atom or a hydroxyl group, or alternatively two Ys may combine together to form =O, and a plurality of Ys may be the same as or different from one another; k represents an integer of 0-15; and m represents 0 or 1. Also specifically disclosed are a method for producing an adamantane derivative represented by the above general formula (I) which is characterized by reacting a halomethyl adamantyl (methyl) ether with a (meth)acrylic acid or an acid anhydride thereof, and a photosensitive material for photoresists containing a polymer obtained from such an adamantane derivative

IT 720682-48-4

RL: RCT (Reactant); RACT (Reactant or reagent)  
(adamantane derivative for photoresist composition)

RN 720682-48-4 CAPLUS

CN Tricyclo[3.3.1.1.3,7]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1028860 CAPLUS

DOCUMENT NUMBER: 143:459814

TITLE: Enantioselective Addition of Vinylzinc Reagents to Aldehydes Catalyzed by Modular Ligands Derived from Amino Acids

AUTHOR(S): Richmond, Meaghan L.; Sprout, Christopher M.; Seto, Christopher T.

CORPORATE SOURCE: Department of Chemistry, Brown University, Providence, RI, 02912, USA

SOURCE: Journal of Organic Chemistry (2005), 70(22), 8835-8840  
CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

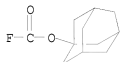
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:459814

AB A series of N-acylthylenediamine-based ligands were synthesized from Boc-protected amino acids. The ligands were screened for the ability to catalyze the asym. addition of vinylzinc reagents to aldehydes. Three sites of diversity on the ligands were optimized for this reaction using a positional scanning approach. The optimized ligand (S)-BocNHCH(CHMeEt)CH<sub>2</sub>NEt<sub>2</sub> (I) was found to catalyze the formation of 15 different (E)-allylic alcs. with enantioselectivities of 52 to 91% and yields of 40 to 90%. This ligand was especially effective for the reaction of aromatic aldehydes with vinylzinc reagents derived from bulky terminal alkynes. I catalyzed the addition of (E)-(3,3-dimethylbut-1-enyl)(ethyl)zinc to 2-naphthaldehyde to give (R,E)-4,4-dimethyl-1-(naphthalene-1-yl)pent-2-en-1-ol in 89% ee. The ee of this product could be increased to 97% through a single recrystn.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (enantioselective addition of vinylzinc reagents to aldehydes catalyzed by  
 modular ligands derived from amino acids)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



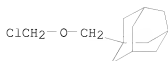
REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:982948 CAPLUS  
 DOCUMENT NUMBER: 143:275623  
 TITLE: Photoresists having excellent dry etching resistance  
 and high sensitivity and manufacture of semiconductor  
 devices therewith  
 INVENTOR(S): Otoguro, Akihiko; Irie, Shigeo; Fujii, Kiyoshi;  
 Takebe, Yoko; Eda, Masataka; Yokokoji, Osamu  
 PATENT ASSIGNEE(S): Semiconductor Leading Technologies Inc., Japan; Asahi  
 Glass Co., Ltd.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005241737	A	20050908	JP 2004-48008	20040224
PRIORITY APPLN. INFO.:			JP 2004-48008	20040224

AB The photoresists comprise cyclic polymerization products of fluorodiene CF<sub>2</sub>:CFCH<sub>2</sub>CHQCH<sub>2</sub>CR<sub>1</sub>:CHR<sub>2</sub> [R<sub>1</sub>, R<sub>2</sub> = H, C<sub>s</sub>3 (fluoro)alkyl, C<sub>s</sub>6 alicyclic hydrocarbyl; Q = (CH<sub>2</sub>)<sub>n</sub>C(CF<sub>3</sub>)<sub>2</sub>OR<sub>3</sub> [n = 0, 1; R<sub>3</sub> = H, etheric O-containing C<sub>s</sub>5 alkyl, C<sub>s</sub>6 alkoxycarbonyl, CH<sub>2</sub>R<sub>4</sub> (R<sub>4</sub> = C<sub>s</sub>6 alkoxycarbonyl)], (CH<sub>2</sub>)<sub>m</sub>CO<sub>2</sub>R<sub>5</sub> (m = 0, 1; R<sub>5</sub> = H, C<sub>s</sub>5 alkyl)], radiation-sensitive acid generators, organic solvents, and optionally amines. The photoresists are pasted on substrates, exposed to 150-250-nm light through reticles, baked, and developed to form patterns. Semiconductor process involving dry etching of wafers through the thus-formed resist masks is further claimed.

IT 720682-48-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (F<sub>2</sub> laser-sensitive photoresists containing cyclopolymd. fluorodienes and having good dry etching resistance)  
 RN 720682-48-4 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



L4 ANSWER 14 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:962319 CAPLUS  
 DOCUMENT NUMBER: 143:257069  
 TITLE: Polymer compound, photoresist composition containing such polymer compound, and method for forming resist pattern  
 INVENTOR(S): Ogata, Toshiyuki; Matsumaru, Syogo; Kinoshita, Yohei; Hada, Hideo; Shiono, Daiju; Shimizu, Hiroaki; Kubota, Naotaka  
 PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 91 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005080473	A1	20050901	WO 2005-JP1228	20050128
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SV, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2006096965	A	20060413	JP 2004-316960	20041029
EP 1717261	A1	20061102	EP 2005-709454	20050128
R: DE, FR				
CN 1918217	A	20070221	CN 2005-80004964	20050128
PRIORITY APPLN. INFO.:			JP 2004-45522	A 20040220
			JP 2004-134585	A 20040428
			JP 2004-179475	A 20040617
			JP 2004-252474	A 20040831
			JP 2004-316960	A 20041029
			WO 2005-JP1228	W 20050128
AB			Disclosed is a polymer compound which enables to obtain a highly sensitive photoresist composition which forms a fine pattern with excellent resolution and	
			good rectangular shape and is capable of obtaining good resist characteristics even when the acid generated by an acid generator is weak. Also disclosed are a photoresist composition using such a polymer compound and	
a			method for forming a resist pattern using such a photoresist composition The photoresist composition and resist pattern-forming method use a polymer compound	

having an alkali-soluble group (i) which is at least one substituent selected from an alc. hydroxyl group, a carboxyl group and a phenolic hydroxyl group and protected by an acid-cleavable dissoln. inhibiting group (ii) represented by general formula  $-\text{CH}_2\text{O}-(\text{CH}_2)_n\text{R}_1$  wherein  $\text{R}_1$  represents an alicyclic group having 20 or less carbon atoms which may have an oxygen, nitrogen, sulfur or halogen atom; and  $n$  represents 0 or an integer of 1-5.

IT 720682-48-4P

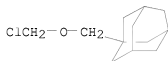
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(polymer compound, photoresist composition containing such polymer compound, and

method for forming resist pattern)

RN 720682-48-4 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:591346 CAPLUS

DOCUMENT NUMBER: 143:77880

TITLE: Preparation of (halomethoxyalkyl)adamantanes

Ono, Hidetoshi; Hori, Kenji; Tanaka, Shinji;

Hatakeyama, Naoyoshi

PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

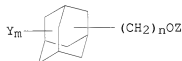
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005179300	A	20050707	JP 2003-425065	20031222
PRIORITY APPLN. INFO.:			JP 2003-425065	20031222
OTHER SOURCE(S):			CASREACT 143:77880; MARPAT 143:77880	

GI



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AB Title compds. I [Y = C1-10 (halo)alkyl, halo, heteroatom-containing group; Z = CH<sub>2</sub>X; X = halo; m = 0-15; n = 0-10] are prepared by reaction of I (Z = H)



with HCHO and hydrogen halides using solvents showing water solubility (at reaction temperature)  $\leq 5$  weight%. 1-Adamantylmethanol was treated with paraformaldehyde and HCl in CH<sub>2</sub>Cl<sub>2</sub> at 30° for 2 h to give 1-(chloromethoxymethyl)adamantane with 99% selectivity.

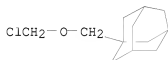
IT 720682-4P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of (halomethoxyalkyl)adamantanes from adamantanealkanols, HCHO, and hydrogen halides)

RN 720682-48-4 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



L4 ANSWER 16 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:284341 CAPLUS

DOCUMENT NUMBER: 143:132933

TITLE: Application of the extended Grunwald-Winstein equation to solvolyses of n-propyl chloroformate

AUTHOR(S): Kyong, Jin Burm; Won, Hoshik; Kevill, Dennis N.

CORPORATE SOURCE: Department of Chemistry, Hanyang University,

Kyunggi-Do, 425-791, S. Korea

SOURCE: International Journal of Molecular Sciences (2005), 6(1-2), 87-96

CODEN: IJMCFK; ISSN: 1422-0067

URL: <http://www.mdpi.org/ijms/papers/i6010087.pdf>

PUBLISHER: Molecular Diversity Preservation International

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB Application of the extended Grunwald-Winstein equation to solvolyses of Pr chloroformate in a variety of pure and binary solvents indicates an addition-elimination pathway in the majority of the solvents but an ionization pathway in the solvents of highest ionizing power and lowest nucleophilicity. For methanolysis, a solvent deuterium isotope effect of 2.17 is compatible with the incorporation of general-base catalysis into the substitution process. Activation parameters are consistent with the duality of mechanism. Very modest pos. salt effects are observed on adding chloride or bromide salts to the ethanolysis.

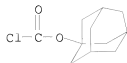
IT 5854-52-4, 1-Adamantyl chloroformate

RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)

(application of the extended Grunwald-Winstein equation to the solvolysis of alkyl chloroformates)

RN 5854-52-4 CAPLUS

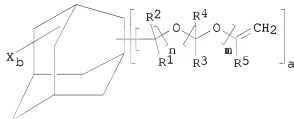
CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:1079728 CAPLUS  
 DOCUMENT NUMBER: 142:38661  
 TITLE: Production of adamantyl vinyl ethers useful as monomers for photosensitive resins  
 INVENTOR(S): Hatakeyama, Naoyoshi; Tanaka, Shinji; Ono, Hidetoshi; Kodoi, Kouichi  
 PATENT ASSIGNEE(S): Idemitsu Petrochemical Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 19 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1486480	A1	20041215	EP 2004-13231	20040604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
JP 2005023066	A	20050127	JP 2004-159276	20040528
KR 2004105614	A	20041216	KR 2004-41664	20040608
US 2005004391	A1	20050106	US 2004-862423	20040608
PRIORITY APPLN. INFO.:			JP 2003-163320	A 20030609
OTHER SOURCE(S):	MARPAT 142:38661			
GI				



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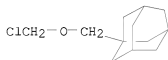
AB An adamantyl vinyl ether has the general formula (I), where each X independently represents hydrogen, halogen, C1-C10-alkyl optionally containing a heteroatom, hydroxy, C1-C8-alkoxy, carboxy, COOR with R being C1-C8-alkyl, or a keto group formed by two X's; each R1, R2, R3, R4 independently represents hydrogen, halogen, or C1-C10-alkyl optionally containing a heteroatom; each R5 independently represents hydrogen, halogen,

or C1-C3-alkyl optionally containing a heteroatom; m and n are independently integers from 0 to 10; a is an integer from 1 to 4; b is an integer from 12 to 15; a+b is 16. The following structures are excluded: a structure in which only 1 to 3 vinyloxy groups are bonded to a bridge head position of the adamantyl group, a structure in which only one vinyloxymethyl group, vinyloxyethyl group or vinyloxypropyl group is bonded to a bridge head position of the adamantyl group, and a structure in which only a vinyloxy group and a hydroxy group are bonded to a bridge head position of the adamantyl group. The adamantyl vinyl ethers are useful as monomers for production of functional resins, such as photosensitive resins for photolithog., fireproofing additives, medical and agricultural intermediates. Thus, 1-[(2-chloroethoxy)methoxy]adamantane was produced in 83.3% yield by refluxing 2-chloroethyl chloromethyl ether (1.55 g, 12 mmol) and 1-adamantanol (1.52 g, 10 mmol) in THF in the presence of triethylamine (1.52 g, 15 mmol) for 8 h. An adamantyl vinyl ether, 1-[(vinyloxy)methoxy]adamantane, was produced in 85.9% yield by refluxing 1-[(2-chloroethoxy)methoxy]adamantane (2.45 g, 10 mmol) and potassium tert-butoxide (1.68 g, 15 mmol) in THF for 2 h.

IT 720682-48-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(production of adamantyl vinyl ethers useful as monomers for photosensitive resins)

RN 720682-48-4 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:973343 CAPLUS

DOCUMENT NUMBER: 142:113591

TITLE: Second Generation Fluorous DEAD Reagents Have Expanded Scope in the Mitsunobu Reaction and Retain Convenient Separation Features

AUTHOR(S): Dandapani, Sivaraman; Curran, Dennis P.

CORPORATE SOURCE: Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA

SOURCE: Journal of Organic Chemistry (2004), 69(25), 8751-8757  
CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

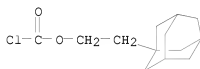
LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:113591

AB A first generation fluorous analog of di-Et azodicarboxylate (DEAD) [F3C(CF2)5CH2CH2O2CN:NCOC2CH2CH2(CF2)5CF3, F-DEAD-1] gives lower yields of products than diisopropyl azodicarboxylate (DIAD) in Mitsunobu reactions involving hindered alcs. or less acidic pronucleophiles such as phenols. A variety of fluoroalkyl hydrazinedicarboxylates are prepared and their retention times on fluorous resin-based HPLC are determined; two of the tested

hydrazinecarboxylates are converted to the corresponding azodicarboxylate reagents, F-DEAD-2 [C8F17(CH2)3O2CN:NCO2CMe3] and F-DEAD-3 [C6F13(CH2)3O2CN:NCO2(CH2)3C6F13]. Mitsunobu reactions using either F-DEAD-2 and F-DEAD-3 and the fluorinated triphenylphosphine 4-Ph2PC6H4CH2CH2(CF2)7CF3 (F-TPP) are effective for a variety of alcs. and nucleophiles such as phenols, sulfonamides, and carboxylic acids; the yields of the corresponding Mitsunobu reactions using DIAD and triphenylphosphine give products in comparable or higher yields. Fluorous coproducts formed in reactions with F-DEAD-2 and F-TPP can be separated easily by fluorous chromatog., while Mitsunobu reactions using F-DEAD-3 and F-TPP as reagents can be separated by fluorous solid phase extraction

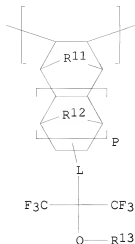
IT 766546-16-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and fluorous HPLC retention times of fluoroalkyl hydrazinedicarboxylates and their use in the preparation of second-generation fluorous azodicarboxylates for Mitsunobu reactions)  
 RN 766546-16-1 CAPLUS  
 CN Carbonochloridic acid, 2-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:874068 CAPLUS  
 DOCUMENT NUMBER: 141:372754  
 TITLE: Positive-working chemical amplification resist composition and manufacture thereof  
 INVENTOR(S): Kanna, Shinichi; Mizutani, Kazuyoshi; Sasaki, Tomoya  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 77 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004294688	A	20041021	JP 2003-85830	20030326
PRIORITY APPLN. INFO.:			JP 2003-85830	20030326
GI				



I

AB Disclosed is the pos.-working resist composition comprising (a) a resin having F in the backbone chain, (b) a resin represented by I (R11,R12 = methylene, O; R13 = H, organic group; L = divalent bonding group; and P = 0, 1), and (c) a photoacid.

IT 777866-01-0

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(pos.-working chemical amplification resist composition)

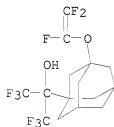
RN 777866-01-0 CAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 3,5-dihydroxytricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester, polymer with 3-[(trifluoroethenyl)oxy]- $\alpha$ , $\alpha$ -bis(trifluoromethyl)tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-methanol (9CI) (CA INDEX NAME)

CM 1

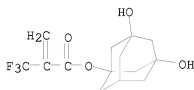
CRN 685522-94-5

CMF C15 H15 F9 O2

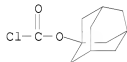


CM 2

CRN 521913-16-6  
CMF C14 H17 F3 O4



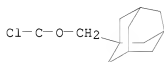
L4 ANSWER 20 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:866544 CAPLUS  
 DOCUMENT NUMBER: 142:55726  
 TITLE: Solvent-Equilibrated Homoadamantyl Chloride Ion Pairs from Chloroformate or Oxachlorocarbene Fragmentations  
 AUTHOR(S): Moss, Robert A.; Tian, Jingzhi; Sauers, Ronald R.  
 CORPORATE SOURCE: Department of Chemistry and Chemical Biology, Rutgers, The State University of New Jersey, New Brunswick, NJ, 08903, USA  
 SOURCE: Organic Letters (2004), 6(23), 4293-4296  
 CODEN: ORLEF7; ISSN: 1523-7060  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 142:55726  
 AB Fragmentations of 3-homoadamantyl chloroformate and 3-homoadamantyloxychlorocarbene produce identical ion pairs as product-determining intermediates.  
 IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
 (solvent-equilibrated homoadamantyl chloride ion pairs from chloroformate or oxachlorocarbene fragmentations)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



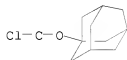
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:725497 CAPLUS  
 DOCUMENT NUMBER: 141:395095  
 TITLE: Solvent-Equilibrated Ion Pairs from Carbene Fragmentation Reactions

AUTHOR(S): Moss, Robert A.; Zheng, Fengmei; Fede, Jean-Marie; Johnson, Lauren A.; Sauers, Ronald R.  
 CORPORATE SOURCE: Department of Chemistry and Chemical Biology, Rutgers The State University of New Jersey, New Brunswick, NJ, 08903, USA  
 SOURCE: Journal of the American Chemical Society (2004), 126(39), 12421-12431  
 CODEN: JACSAT; ISSN: 0002-7863  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 141:395095  
 AB [R+ OC Cl-] ion pairs were generated in methanol/dichloroethane solns., with R+ as the 1-bicyclo[2.2.2]octyl, 1-adamantyl, or 3-homoadamantyl cation. Ion pairs were produced either by the direct fragmentation of alkoxychlorocarbenes (ROCCl), with R = 1-bicyclo[2.2.2]octyl, 1-adamantyl, or 3-homoadamantyl, or by the ring expansion-fragmentation of R'CH2OCCl, with R' = 1-norbornyl, 3-noradamantyl, or 1-adamantyl. Correlations of the [ROMe]/[RCl] product ratios as a function of the mole fraction of MeOH in dichloroethane showed that the homoadamantyl chloride ion pairs, produced by either the direct or ring expansion-fragmentations, were identical, solvent- and anion-equilibrated, and precursor independent. Laser flash photolysis expts. gave 20-30 ps as the time required for solvent equilibration and precursor independence. Methanol/chloride selectivities of the (less-stable) 1-adamantyl chloride and 1-bicyclo[2.2.2]octyl chloride ion pairs were not independent of their ROCCl or R'CH2OCCl precursors. Computational studies provided transition states for the fragmentations and for the structures of the ion pairs.  
 IT 182802-27-3 433713-18-9  
 RL: CPS (Chemical process); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent) (solvent-equilibrated ion pairs from carbene fragmentation reactions)  
 RN 182802-27-3 CAPLUS  
 CN Methylene, chloro(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethoxy)- (9CI) (CA INDEX NAME)

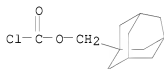


RN 433713-18-9 CAPLUS  
 CN Methylene, chloro(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yloxy)- (9CI) (CA INDEX NAME)

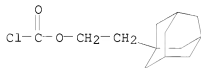


REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 22 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:641925 CAPLUS  
 DOCUMENT NUMBER: 141:313663  
 TITLE: Separation tagging with cyclodextrin-binding groups: Mitsunobu reactions with bis(2-(1-adamantyl)ethyl) azodicarboxylate (BadEAD) and bis(1-adamantylmethyl) azodicarboxylate (BadMAD)  
 AUTHOR(S): Dandapani, Sivaraman; Newsome, Jeffery J.; Curran, Dennis P.  
 CORPORATE SOURCE: Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA  
 SOURCE: Tetrahedron Letters (2004), 45(35), 6653-6656  
 CODEN: TELEAY; ISSN: 0040-4039  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 141:313663  
 AB A new method for separation tagging with cyclodextrin-binding groups is introduced and is exemplified in the context of the Mitsunobu reaction with adamantyl tags. HPLC expts. showed that mols. containing adamantyl groups were especially well retained on Sumichiral OA7500  $\beta$ -methylated cyclodextrin bonded silica columns relative to many other types of mols. Two new Mitsunobu reagents, bis(1-adamantylmethyl) azodicarboxylate (BadMAD) and bis(2-(1-adamantyl)ethyl) azodicarboxylate (BadEAD), were prepared, used in typical Mitsunobu reactions and separated with both  $\beta$ -methylated cyclodextrin bonded silica and standard silica.  
 IT 21317-84-0P 766546-16-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (Mitsunobu reactions with bis(2-(1-adamantyl)ethyl) azodicarboxylate and bis(1-adamantylmethyl) azodicarboxylate and separation tagging with cyclodextrin-binding groups)  
 RN 21317-84-0 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethyl ester (CA INDEX NAME)



RN 766546-16-1 CAPLUS  
 CN Carbonochloridic acid, 2-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)

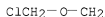


REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS



## RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 23 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:635351 CAPLUS  
 DOCUMENT NUMBER: 141:424972  
 TITLE: A new monocyclic fluoropolymer for 157-nm photoresists  
 AUTHOR(S): Sasaki, Takashi; Takebe, Yoko; Eda, Masataka;  
 Yokokoji, Osamu; Irie, Shigeo; Ootoguro, Akihiko;  
 Fujii, Kiyoshi; Itani, Toshiro  
 CORPORATE SOURCE: Research Center, Asahi Glass Co., Ltd., Yokohama,  
 221-8755, Japan  
 SOURCE: Journal of Photopolymer Science and Technology (2004),  
 17(4), 639-644  
 CODEN: JSTEHW, ISSN: 0914-9244  
 PUBLISHER: Technical Association of Photopolymers, Japan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB We earlier developed a series of fluoropolymers (FPRs) for use as  
 first-generation 157-nm photoresist polymers. These FPRs have a partially  
 fluorinated monocyclic structure and provide excellent transparency.  
 However, their etching resistance is low (half that of conventional KrF  
 resists) and an insufficient dissoln. rate in tetramethylammonium  
 hydroxide (TMAH) solution. To improve the characteristics of these polymers,  
 while retaining high transparency, we had to redesign the main chain  
 fluoropolymer structure. In this paper, we describe a new monocyclic  
 fluoropolymer structure for a second-generation 157-nm photoresist  
 polymer. This structure also has a fluorine atom in the polymer main  
 chain, as well as a fluoro-containing acidic alc. group. We synthesized two  
 types of fluoropolymers, ASF-1 and ASF-2. We found that ASF-1 had  
 transparency of 0.18  $\mu\text{m}^{-1}$ , better than that of the FPRs, and the  
 etching resistance was improved. Unfortunately, the dissoln. rate was  
 poor. On the other hand, ASF-2 showed even better transparency of 0.1  
 $\mu\text{m}^{-1}$ , improved etching resistance, and a dissoln. rate of more than 600  
 nm/s, which is sufficient for use as a resist. The introduction of a  
 protecting group (e.g., the methoxymethyl or adamantylmethoxymethyl group)  
 to the hydroxyl group of ASF-2 can be done after the polymerization reaction.  
 Using partially protected ASF-2 with an appropriate protecting group, we  
 were able to fabricate a sub-60-nm line-and-space pattern.  
 IT 720682-48-4DP, reaction products with fluoropolymer, sodium salt  
 RL: DEV (Device component use); PRP (Properties); SPN (Synthetic  
 preparation); PREP (Preparation); USES (Uses)  
 (preparation and properties of monocyclic fluoropolymers for 157-nm  
 photoresists)  
 RN 720682-48-4 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



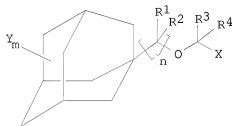
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

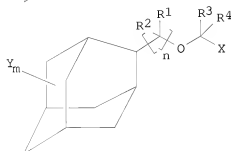
ACCESSION NUMBER: 2004:565183 CAPLUS  
 DOCUMENT NUMBER: 141:107948  
 TITLE: Adamantane derivatives and process for producing them  
 INVENTOR(S): Tanaka, Shinji; Ono, Hidetoshi; Kodoi, Kouichi;  
 Hatakeyama, Naoyoshi  
 PATENT ASSIGNEE(S): Idemitsu Petrochemical Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004058675	A1	20040715	WO 2003-JP16258	20031218
W: KR, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
JP 2004217627	A	20040805	JP 2003-414445	20031212
EP 1577285	A1	20050921	EP 2003-780891	20031218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
US 2006149073	A1	20060706	US 2005-540547	20051213
PRIORITY APPLN. INFO.:				
			JP 2002-374659	A 20021225
			WO 2003-JP16258	W 20031218

OTHER SOURCE(S): MARPAT 141:107948  
 GI



I



II

AB Compds. I and II (R1-R4 = H, halo, C1-10 alkyl, C1-10 haloalkyl; X = halo;  
 Y = C1-10 alkyl, C1-10 haloalkyl, halo, heteroatom-containing group; m = 0-15;

n = 0-10; wherein in I, the case where both of m and n are 0 and both of R3 and R4 are H is excluded; in I and II, two Y groups may form :O group), such as chloromethyl adamantylmethyl ether and chloromethyl 4-oxo-2-adamantyl ether, are prepared. The adamantane derivs. are useful as modifiers for photoresist resins in the field of photolithog., dry-etching resistance improvers, intermediates for agricultural chems. and medicines, and other various industrial products.

IT 720682-48-4P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of adamantane derivs.)

RN 720682-48-4 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)

L4 ANSWER 25 OF 163 CAPLUS COPYRIGHT 2008 ACS on SIN

ACCESSION NUMBER: 2004:515466 CAPLUS

DOCUMENT NUMBER: 141:71301

TITLE: Process for preparation of fluorinated adamantane derivatives

INVENTOR(S): Okazoe, Takashi; Watanabe, Kunio; Ito, Masahiro; Murotani, Eisuke

PATENT ASSIGNEE(S): Asahi Glass Company, Limited, Japan

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

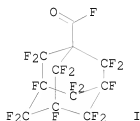
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052832	A1	20040624	WO 2003-JP15879	20031211
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG			
CA 2509158	A1	20040624	CA 2003-2509158	20031211
AU 2003289036	A1	20040630	AU 2003-289036	20031211
EP 1574497	A1	20050914	EP 2003-778821	20031211
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
CN 1726182	A	20060125	CN 2003-80105893	20031211
US 2005277785	A1	20051215	US 2005-143978	20050603
US 7314952	B2	20080101		

US 2005288528  
PRIORITY APPLN. INFO.:

A1 20051229

US 2005-153438 20050616  
JP 2002-359471 A 20021211  
WO 2003-JP15879 W 20031211  
JP 2004-178330 A 20040616  
JP 2004-178331 A 20040616  
US 2005-143978 A2 20050603

OTHER SOURCE(S): MARPAT 141:71301  
GI

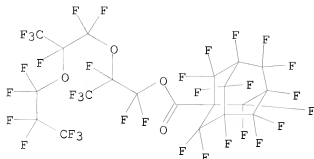


AB Title compds. represented by the general formula A(-G-Q-R)<sub>n</sub> and Af(-Gf-Q-Rf)<sub>n</sub>, wherein A is an n-valent group derived from adamantane by the removal of n hydrogen atoms in which the residual hydrogen atoms may be each replaced by alkyl; R is a fluorine-containing monovalent organic group; n is an integer of 1 to 4; G is -CH- or a single bond; Q is -CO<sub>2</sub>- or -OCO-; Af is an n-valent group as defined for A wherein at least one of the hydrogen atoms forming C-H linkages is replaced by fluorine; Rf is a fluorine-containing monovalent organic group; and Gf is -CF- or a single bond, are prepared For example, esterification of 1-adamantylmethanol with FCOCF(CF<sub>3</sub>)CF<sub>2</sub>CF<sub>2</sub>CF<sub>3</sub>, followed by fluorination and thermolysis, gave I. Thus, this invention provides the methods of the production of fluorinated adamantane derivs. which are excellent in etching resistance and useful as photolithog. material.

IT 709615-36-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reaction or reagent)  
(preparation of fluorinated adamantane derivs.)

RN 709615-36-1 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid,  
2,2,3,4,4,5,6,6,7,8,8,9,9,10,10-pentadecafluoro-, 1,1,2,3,3,3-hexafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy]propyl ester (9CI)  
(CA INDEX NAME)



L4 ANSWER 26 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:491214 CAPLUS

DOCUMENT NUMBER: 142:472501

TITLE: A new monocyclic fluoropolymer structure for 157-nm photoresists

AUTHOR(S): Takebe, Yoko; Eda, Masataka; Okada, Shinji; Yokokoji, Osamu; Irie, Shigeo; Otoguro, Akihiko; Fujii, Kiyoshi; Itani, Toshiro

CORPORATE SOURCE: Research Center, Asahi Glass Co., Ltd., Kanagawa-ken, 221-8755, Japan

SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2004), 5376(Pt. 1, Advances in Resist Technology and Processing XXI), 151-158  
CODEN: PSISDG; ISSN: 0277-786X

PUBLISHER: SPIE-The International Society for Optical Engineering

DOCUMENT TYPE: Journal

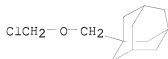
LANGUAGE: English

AB We earlier developed a series of fluoropolymers (FPRs) for use as first-generation 157-nm photoresist polymers. These FPRs have a partially fluorinated monocyclic structure and provide excellent transparency. However, their etching resistance is low (half that of conventional KrF resists) and an insufficient dissoln. rate in tetramethylammonium hydroxide (TMAH) solution. To improve the characteristics of these polymers, while retaining high transparency, we had to redesign the main chain fluoropolymer structure. In this paper, we describe a new monocyclic fluoropolymer structure for a second-generation 157-nm photoresist polymer. This structure also has a fluorine atom in the polymer main chain, as well as a fluoro-containing acidic alc. group. We synthesized two types of fluoropolymers, ASF-1 and ASF-2. We found that ASF-1 had transparency of 0.18  $\mu\text{m}^{-1}$ , better than that of the FPRs, and the etching resistance was improved. Unfortunately, the dissoln. rate was poor. On the other hand, ASF-2 showed even better transparency of 0.1  $\mu\text{m}^{-1}$ , improved etching resistance, and a dissoln. rate of more than 600 nm/s, which is sufficient for use as a resist. The introduction of a protecting group (e.g., the methoxymethyl or adamantylmethoxymethyl group) to the hydroxyl group of ASF-2 can be done after the polymerization reaction. Using partially protected ASF-2 with an appropriate protecting group, we were able to fabricate a sub-60-nm line-and-space pattern.

IT 720682-48-4DP, reaction products

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(monocyclic fluoropolymer for 157-nm photoresists)

RN 720682-48-4 CAPLUS  
 CN Tricyclo[3.3.1.1.3,7]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 27 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:389970 CAPLUS

DOCUMENT NUMBER: 140:383121

TITLE: F2 excimer laser-sensitive positive photoresist compositions with good coatability and dry etchability  
 Kanna, Shinichi; Mizutani, Kazuyoshi; Sasaki, Tomoya  
 Fuji Photo Film Co., Ltd., Japan  
 Jpn. Kokai Tokkyo Koho, 65 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

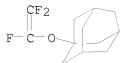
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	JP 2004138887	A	20040513	JP 2002-304421	20021018
PRIORITY APPLN. INFO.:				JP 2002-304421	20021018
AB	The photoresist compns. sensitive to vacuum UV (≤160 nm) contain resins comprising 1st repeating units CF <sub>2</sub> C(XZ)F (X = O, S; Z = organic group with no acid decomposability) and 2nd repeating units having groups that are converted to alkali-soluble groups by acid decomposition so as to increase solubility of the resins in alkali developers. The resins may further contain cycloolefin units.				
IT	685523-13-1 685523-15-3 RL: TEM (Technical or engineered material use); USES (Uses) (F2 excimer laser-sensitive pos. photoresists with good coatability and dry etchability)				
RN	685523-13-1 CAPLUS				
CN	Carbonic acid, 1-(bicyclo[2.2.1]hept-5-en-2-ylmethyl)-2,2,2-trifluoro-1-(trifluoromethyl)ethyl 1,1-dimethylethyl ester, polymer with 1-[(trifluoroethenyl)oxy]tricyclo[3.3.1.1.3,7]decane (9CI) (CA INDEX NAME)				

CM 1

CRN 685522-91-2

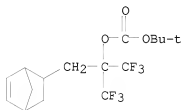
CMF C12 H15 F3 O



CM 2

CRN 196314-63-3

CMF C16 H20 F6 O3



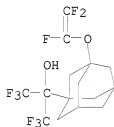
RN 685523-15-3 CAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 2-methyl-2-propenenitrile and 3-[(trifluoroethenyl)oxy]- $\alpha,\alpha$ -bis(trifluoromethyl)tricyclo[3.3.1.1.3,7]decane-1-methanol (9CI) (CA INDEX NAME)

CM 1

CRN 685522-94-5

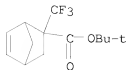
CMF C15 H15 F9 O2



CM 2

CRN 365568-55-4

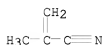
CMF C13 H17 F3 O2



CM 3

CRN 126-98-7

CMF C4 H5 N



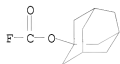
L4 ANSWER 28 OF 163 CAPLUS COPYRIGHT 2008 ACS on SIN  
 ACCESSION NUMBER: 2004:61350 CAPLUS  
 DOCUMENT NUMBER: 140:253465  
 TITLE: Nucleophilic Addition to Electron-Rich  
 Heteroaromatics: Dearomatizing Anionic Cyclizations of  
 Pyrrolecaboxamides  
 AUTHOR(S): Clayden, Jonathan; Turnbull, Rachel; Pinto, Ivan  
 CORPORATE SOURCE: Department of Chemistry, University of Manchester,  
 Manchester, M13 9PL, UK  
 SOURCE: Organic Letters (2004), 6(4), 609-611  
 CODEN: ORLEF7; ISSN: 1523-7060  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 140:253465  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Despite its electron-rich nature, a pyrrole ring is susceptible to intramol. nucleophilic attack by organolithiums. The resulting dearomatizing anionic cyclization yields new 5- or 7-membered heterocyclic rings. Formation of a new 5-membered ring, by cyclization of an N-benzylpyrrolecaboxamide, is accompanied by ring opening of the original pyrrole to yield 3-aminovinylpyrrolinones. Formation of a new 7-membered ring, by cyclization of an N-allyl pyrrolecaboxamide, yields bicyclic pyrroloazepinones. The amidation of 2-propenoyl chloride with 2-methyl-2-propanamine and alkenylation with 3-bromo-1-propene gave N-(1,1-dimethylethyl)-N-(2-propenyl)-2-propenamide, which was treated with TosMIC to give a pyrrole derivative which was protected using 2,2-diethylbutanoyl chloride to give the N-(2-propenyl)-1H-pyrrole-3-carboxamide I. Lithiation and cyclization of I gave a pyrrolo[3,2-c]azepine intermediate II. Treatment of the latter with

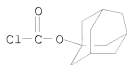


iodomethane gave the protected pyrrolo[3,2-c]azepin-4(2H)-one III.  
 IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of (aminoethenyl)pyrrolones by formation of pyrrolocarboxamides  
 and their sequential lithiation, ring opening and cyclization)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



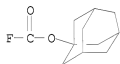
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 29 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:790047 CAPLUS  
 DOCUMENT NUMBER: 140:42418  
 TITLE: Solid-Phase Oligodeoxynucleotide Synthesis: A Two-Step  
 Cycle Using Peroxy Anion Deprotection  
 AUTHOR(S): Sierzchala, Agnieszka B.; Dellinger, Douglas J.;  
 Betley, Jason R.; Wyrzykiewicz, Tadeusz K.; Yamada,  
 Christina M.; Caruthers, Marvin H.  
 CORPORATE SOURCE: Department of Chemistry and Biochemistry, University  
 of Colorado, Boulder, CO, 80309, USA  
 SOURCE: Journal of the American Chemical Society (2003),  
 125(44), 13427-13441  
 CODEN: JACSAT; ISSN: 0002-7863  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 140:42418  
 AB A novel solid-phase phosphoramidite based oligodeoxynucleotide two-step  
 synthesis method has been developed. Keys to this method are replacement  
 of the 5'-dimethoxytrityl blocking group with an aryloxycarbonyl and the  
 use of N-dimethoxytrityl protection for the exocyclic amines of adenine  
 and cytosine. With these modifications, coupling of each  
 2'-deoxynucleoside 3'-phosphoramidite to the growing  
 oligodeoxyribonucleotide on the solid support can be followed by treatment  
 with an aqueous mixture of peroxy anions buffered at pH 9.6. This reagent  
 effectively removes the carbonate protecting group and simultaneously  
 oxidizes the phosphite internucleotide linkage. As a consequence a new  
 two-step synthesis cycle is possible. Oligodeoxynucleotides synthesized  
 using this approach are identical to authentic samples when tested by a  
 variety of anal. techniques.  
 IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (solid phase oligodeoxyribonucleotide synthesis via two-step cycle  
 using peroxy anion deprotection)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 30 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:648974 CAPLUS  
 DOCUMENT NUMBER: 139:276466  
 TITLE: Modular Ligands Derived from Amino Acids for the Enantioselective Addition of Organozinc Reagents to Aldehydes  
 AUTHOR(S): Richmond, Meaghan L.; Seto, Christopher T.  
 CORPORATE SOURCE: Department of Chemistry, Brown University, Providence, RI, 02912, USA  
 SOURCE: Journal of Organic Chemistry (2003), 68(19), 7505-7508  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 139:276466  
 AB A new series of modular chiral ligands, derived from amino acids and containing a tertiary amine, an amino acid side chain, and a carbamate or amide functional group, were prepared and tested for their ability to catalyze the asym. addition of diethylzinc to aromatic and aliphatic aldehydes.  
 IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (amine carbamoylation; preparation of amino acid-derived amino-substituted amides and carbamates as modular ligands for enantioselective addition of diethylzinc to aldehydes)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 31 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:463117 CAPLUS  
 DOCUMENT NUMBER: 139:286461  
 TITLE: Nitrogen substitution modifies the activity of cytosine on neuronal nicotinic receptor subtypes  
 Carbone, Eric; Sparatore, Fabio; Canu-Boido, Caterina; Salvagno, Cristian; Baldani-Guerra, Barbara; Terstappen, Georg; Zwart, Ruud; Vijverberg, Henk; Clementi, Francesco; Gotti, Cecilia  
 AUTHOR(S):

CORPORATE SOURCE: Department of Medical Pharmacology and Center of Excellence on Neurodegenerative Diseases, Section of Cellular and Molecular Pharmacology, Institute of Neuroscience, University of Milan, CNR, Milan, 20129, Italy

SOURCE: European Journal of Pharmacology (2003), 471(2), 85-96  
CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

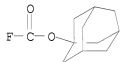
OTHER SOURCE(S): CASREACT 139:286461

AB Cytisine very potently binds and activates the  $\alpha 3\beta 4$  and  $\alpha 7$  nicotinic subtypes, but only partially agonizes the  $\alpha 4\beta 2$  subtype. Although with a lower affinity than cytosine, new cytosine derivs. with different substituents on the basic nitrogen (CC1-CC8) bind to both the heteromeric and homomeric subtypes, with higher affinity for brain [3H]epibatidine receptors. The cytosine derivs. were tested on the Ca<sup>2+</sup> flux of native or transfected cell lines expressing the rat  $\alpha 7$ , or human  $\alpha 3\beta 4$  or  $\alpha 4\beta 2$  subtypes using Ca<sup>2+</sup> dynamics in conjunction with a fluorescent image plate reader. None elicited any response at doses of up to 30-100  $\mu$ M, but all inhibited agonist-induced responses. Compds. CC5 and CC7 were also electrophysiol. tested on oocyte-expressed rat  $\alpha 4\beta 2$ ,  $\alpha 3\beta 4$  and  $\alpha 7$  subtypes. CC5 competitively antagonized the  $\alpha 4\beta 2$  and  $\alpha 3\beta 4$  subtypes with similar potency, whereas CC7 only partially agonized them with maximum responses of resp. 3% and 11% of those of 1 mM acetylcholine. Neither compound induced any current in the oocyte-expressed  $\alpha 7$  subtype, and both weakly inhibited acetylcholine-induced currents. Adding chemical groups of a different class or size to the basic nitrogen of cytosine leads to compds. that lose full agonist activity on the  $\alpha 3\beta 4$  and  $\alpha 7$  subtypes.

IT 62087-82-5, 1-Adamantyl fluoroformate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(nitrogen substitution modifies activity of cytosine on neuronal nicotinic receptor subtypes)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 32 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:462558 CAPLUS

DOCUMENT NUMBER: 139:374236

TITLE: Synthesis of new 3-alkoxy-7-amino-4-chloro-isocoumarin derivatives as new  $\beta$ -amyloid peptide production inhibitors and their activities on various classes of protease

AUTHOR(S): Bihel, Frederic; Quelever, Gilles; Lelouard, Hugues;

Petit, Agnes; Alves da Costa, Cristine; Pourquie, Olivier; Checler, Frederic; Thellend, Annie; Pierre, Philippe; Kraus, Jean-Louis

CORPORATE SOURCE: Laboratoire de Chimie Biomoléculaire, Developmental Biology Institute of Marseille (CNRS-INSERM-Univ. Mediterranée- AP Marseille), INSERM U-382, Faculté des Sciences de Luminy, Marseille, 13288, Fr.

SOURCE: Bioorganic & Medicinal Chemistry (2003), 11(14), 3141-3152

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

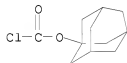
OTHER SOURCE(S): CASREACT 139:374236

AB A series of new 7-substituted-4-chloro-3-alkoxy isocoumarin derivs. were synthesized and evaluated as inhibitors of representative classes of proteases: serine protease ( $\alpha$ -chymotrypsin, trypsin), cysteine protease (Caspase-3), and aspartyl protease (HIV-protease), 20S proteasome and also as inhibitors of amyloid peptide  $\gamma$ -secretase-mediated production. Protease inhibition selectivity is directly related to the structure of the substituent at the 7-position of the isocoumarin nucleus. 7-Nitro-isocoumarin derivs. are potent  $\alpha$ -chymotrypsin inhibitors but slightly active or inactive on HIV-protease, as well as on cysteine protease. In contrast, only derivs. bearing a free amino or a substituted amino group at the 7-position of the isocoumarin nucleus, were found weakly active or inactive on  $\alpha$ -chymotrypsin, trypsin, Caspase-3 and HIV-protease, but prevent  $\gamma$ -secretase-mediated production of A $\beta$  40/42 amyloid peptides, which is known to be involved in Alzheimer's disease. Moreover, the most active compds. on  $\beta$ -amyloid peptide production show only weak or moderate inhibitory activity on the 20S proteasome. The obtained results suggest that the described new isocoumarin analogs could be of interest for the development of new agents directed towards Alzheimer's disease.

IT 5854-52-4, 1-Adamantyl chloroformate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(synthesis of isocoumarin analogs as  $\beta$ -amyloid peptide production and protease inhibitors)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

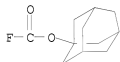
ACCESSION NUMBER: 2002:939176 CAPLUS

DOCUMENT NUMBER: 138:250589

TITLE: (R)-3-amidinophenylalanine-derived inhibitors of factor Xa with a novel active-site binding mode

AUTHOR(S): Mueller, Markus Michael; Sperl, Stefan; Sturzebecher,

Jorg; Bode, Wolfram; Moroder, Luis  
 CORPORATE SOURCE: Max-Planck-Institut fur Biochemie, Martinsried,  
 D-82152, Germany  
 SOURCE: Biological Chemistry (2002), 383(7/8), 1185-1191  
 CODEN: BICHF3; ISSN: 1431-6730  
 PUBLISHER: Walter de Gruyter GmbH & Co. KG  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:250589  
 AB A putative non-substrate-like binding mode of (R)-3-amidinophenylalanine  
 derivs. to factor Xa was derived from modeling expts. based on X-ray anal.  
 of their complexes with trypsin and subsequently used to design a new  
 generation of inhibitors. However, the resulting inhibitory potencies  
 were not at all consistent with the working assumption, although with an  
 adamantyl-ureido derivative of (R)-3-amidinophenylalanine phenethyl amide a  
 highly selective nanomolar inhibition of factor Xa was achieved. The  
 X-ray anal. of the complex of this ligand with factor Xa revealed an  
 unexpected new binding mode, of which the most important feature is the  
 interaction of the C-terminal aryl moiety with a hydrophobic subregion of  
 the S1 subsite, while the adamantyl group occupies the hydrophobic S3/S4  
 subsites of the enzyme.  
 IT 62087-82-5, Adamantylloxycarbonylfluoride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 ((R)-3-amidinophenylalanine-derived inhibitors of factor Xa exhibit  
 novel active site binding mode)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 34 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:487421 CAPLUS  
 DOCUMENT NUMBER: 137:47645  
 TITLE: Preparation of adamantyl-polyethylene glycol  
 containing sugar and peptide residues and inclusion  
 complexes as therapeutic agents  
 INVENTOR(S): Hwang, Pun Suzie; Gonzalez, Hector; Davis, Mark E.;  
 Bellocq, Nathalie; Cheng, Jianjun  
 PATENT ASSIGNEE(S): California Institute of Technology, USA; Insert  
 Therapeutics, Inc.  
 SOURCE: PCT Int. Appl., 138 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002049676	A2	20020627	WO 2001-US48620	20011219
WO 2002049676	A3	20021227		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG			
CA 2431207	A1	20020627	CA 2001-2431207	20011219
AU 2002029065	A	20020701	AU 2002-29065	20011219
US 2003008818	A1	20030109	US 2001-21312	20011219
US 7018609	B2	20060328		
US 2003017972	A1	20030123	US 2001-21294	20011219
US 7166302	B2	20070123		
EP 1351710	A2	20031015	EP 2001-990201	20011219
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
CN 1491117	A	20040421	CN 2001-822729	20011219
HU 2004000655	A2	20040628	HU 2004-655	20011219
BR 2001016346	A	20040706	BR 2001-16346	20011219
JP 2004523502	T	20040805	JP 2002-551013	20011219
RU 2288921	C2	20061210	RU 2003-121303	20011219
AU 2002229065	B2	20070524	AU 2002-229065	20011219
ZA 2003004562	A	20040803	ZA 2003-4562	20030611
MX 2003PA05394	A	20040531	MX 2003-PA5394	20030616
US 2006182795	A1	20060817	US 2005-321441	20051228
US 2007128167	A1	20070607	US 2006-588033	20061025
PRIORITY APPLN. INFO.:			US 2000-256341P	P 20001219
			US 2000-256344P	P 20001219
			US 2001-293543P	P 20010529
			US 2001-21294	A3 20011219
			US 2001-21312	A3 20011219
			WO 2001-US48620	W 20011219

AB The invention provides a composition containing particulate composite of a polymer

with a formula of adamantyl-(CH<sub>2</sub>)<sub>n</sub>-Ja-PEGx-Lb-(functional group)<sub>y</sub> wherein J is NH, C(O)NH(CH<sub>2</sub>)<sub>d</sub>, NHC(O)(CH<sub>2</sub>)<sub>d</sub>, XH<sub>2</sub>SS, CO<sub>2</sub>, (CH<sub>2</sub>)<sub>e</sub>OP(O)(O)(CH<sub>2</sub>)<sub>e</sub>-adamantyl, O, peptide, polypeptide, NH(CO)CHR<sub>1</sub>NH(CO)CHR<sub>1</sub>NH; R<sub>1</sub> is (CH<sub>2</sub>)<sub>a</sub>CO<sub>2</sub>H, (CH<sub>2</sub>)<sub>a</sub>CONH<sub>2</sub>; PEG is O(CH<sub>2</sub>CH<sub>2</sub>O)<sub>z</sub>; where z is 2-500; L is H, NH<sub>2</sub>, NH(CO)(CH<sub>2</sub>)<sub>e</sub>(CO)CH<sub>2</sub>, SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>, SS, CO<sub>2</sub>, carbohydrate residue; a is 0-1, b is 0-1; d is 0-6; e is 1-6; yr is 0-1, x is 0-1, and a therapeutic agent. The composition also contains a complexing agent. The polymer interacts with the complexing agent in a host-guest or a guest-host interaction to form an inclusion complex. A therapeutic composition of the invention may be used to deliver the therapeutic agent and to treat various disorders. Both the polymer of the particulate composite and the complexing agent may be used to introduce functionality into the therapeutic composition. The invention also relates to a method of preparing a composition. The method combines a therapeutic agent, a polymer having host or guest functionality, and a complexing agent having guest or host functionality to form the therapeutic composition. The complexing agent forms an inclusion complex with the polymer. The invention also relates to a method of delivering a therapeutic agent. According to the method, a

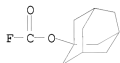
therapeutically effective amount of a therapeutic composition of the invention

is administered to a mammal (e.g. human or animal) in recognized need of the therapeutic.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of adamantylpolyethylene glycol containing sugar and peptide residues and inclusion complexes as therapeutic agents)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 35 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:465968 CAPLUS

DOCUMENT NUMBER: 137:47116

TITLE: Isocoumarin derivatives, particularly 7-amino-4-chloro-3-(2-methoxyethoxy)isochromen-1-ones, inhibiting production of amyloid peptide, preparation, compositions containing them, and uses

INVENTOR(S): Bihel, Frederic; Delaage, Michel; Jouve, Caroline; Kraus, Jean-Louis; Pourquie, Olivier; Williamson, Toni-Louise; Drouot, Cyrille

PATENT ASSIGNEE(S): Trophos, Fr.

SOURCE: PCT Int. Appl., 58 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

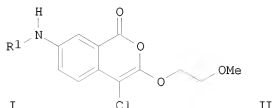
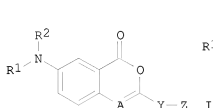
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002048102	A2	20020620	WO 2001-FR3902	20011210
WO 2002048102	A3	20040513		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
FR 2817867	A1	20020614	FR 2000-16060	20001211
FR 2817867	B1	20060630		
AU 2002017228	A5	20020624	AU 2002-17228	20011210
PRIORITY APPLN. INFO.:			FR 2000-16060	A 20001211
			WO 2001-FR3902	W 20011210

OTHER SOURCE(S):  
GI

MARPAT 137:47116

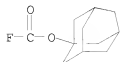


AB The invention concerns novel compds. inhibiting production of amyloid peptide, their preparation and their uses. In particular, the invention concerns compds. I [R1, R2 = H, alkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, aryl, aralkyl, aralkenyl, alkoxy, heterocyclyl, alkylthio, COR, CO2R, CONHR, SO2R; R = alkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, aryl, aralkyl, aralkenyl, heterocyclyl, alkylthio; or RCO = residue of (un)saturated fatty acid or (un)protected amino acid or peptide; Z = CH2CH2OMe or CH2CH2OCH2CH2OMe, optionally substituted by (un)saturated fatty acid or (un)protected amino acid or peptide; A = N, P, C(X); X = halo (preferably Cl) or OB; B = H, aryl, alkyl, or tosyl; Y = O, S, N; all groups alkyl, alkenyl, cycloalkyl, aryl, alkoxy, heterocyclyl, or alkylthio are optionally substituted by halo, OH, alkyl, aryl, heterocyclyl, NH2, NO2, cyano, CF3, etc.]. The invention also concerns methods for identifying or characterizing compds. which inhibit production of amyloid peptide (and in particular which are also non-toxic for embryonic development). The invention further concerns methods and uses of said compds. for treating nervous system disorders, in particular neurodegenerative pathologies such as Alzheimer's disease. For example, homophthalic acid was nitrated in the 4-position (vs. CH2 group), followed by acid esterification with 2-methoxyethanol, chlorination and cyclocondensation using PCl5, and hydrogenation of nitro, to give title compound II (R1 = H). Treatment of the latter with 1-adamantyl fluoroformate and Et3N in THF gave II [R1 = adamantan-1-yloxy carbonyl]. In tests for inhibition of the production of amyloid  $\beta$  in chickens and rats, measured by ELISA, various compds. I gave 15-70% inhibition at 1-100  $\mu$ M. Both compds. II cited above were substantially less toxic than two reference compds. (MW167 and MG132) toward development of chick embryos. The five most preferred compds. I were also determined to be inactive toward embryonic segmentation at 20-50  $\mu$ M.

IT 62087-82-5, 1-Adamantyl fluoroformate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(precursor; preparation of aminoisocoumarin derivs. as inhibitors of amyloid peptide production)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)





L4 ANSWER 36 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:287622 CAPLUS

DOCUMENT NUMBER: 137:5856

TITLE: Bridgehead Carbocations via Carbene Fragmentation:

Erasing a 1010 Kinetic Preference

AUTHOR(S): Moss, Robert A.; Zheng, Fengmei; Fede, Jean-Marie; Ma, Yan; Sauers, Ronald R.; Toscano, John P.; Showalter, Brett M.

CORPORATE SOURCE: Department of Chemistry and Chemical Biology, Rutgers, The State University of New Jersey, New Brunswick, NJ, 08903, USA

SOURCE: Journal of the American Chemical Society (2002), 124(19), 5258-5259

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:5856

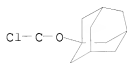
AB 1-Norbornyloxylchlorocarbene (1-NorOCCl), 1-bicyclo[2.2.2]octyloxylchlorocarbene (1-BcoOCCl), and 1-adamantyloxylchlorocarbene (1-AdOCCl) were generated in dichloroethane (DCE) by photolysis of the appropriate diazirines. The exclusive product in each case was the bridgehead alkyl chloride formed by fragmentation of the carbene to [R+ OC Cl-] ion pairs, loss of CO, and cation-anion collapse. In mixts. of methanol and DCE, each carbene gave three products: RCl, ROH, and ROME. RCl and ROME resulted from competition between ion pair collapse and methanol capture of the cation. ROH resulted from methanol capture of the carbene (before fragmentation), followed by eventual methanolysis and hydrolysis of ROCH(Cl)OME. The ratios of carbene capture to carbene fragmentation fell in the order 1-NorOCCl > BcoOCCl > 1-AdOCCl; 1-Nor+ was the least stable cation and the slowest to form by fragmentation, so that this carbene was the most readily captured. This trend was accentuated in methanol-pentane mixts., where ionic fragmentation was further slowed in the less polar solvent. Laser flash photolysis with either UV or time-resolved IR (TRIR) monitoring permitted the determination of the absolute rate consts. for fragmentations

of the carbenes in DCE at 25°. The rate consts. (s-1) were: 1-NorOCCl (3.3 + 104), 1-BcoOCCl (1.5 + 105), and 1-AdOCCl (5.9 + 105). The rate consts. decreased in the order of increasing strain in the resulting bridgehead carbocation, but the range of rate consts. was compressed to a factor of only .apprx.18. This contrasts with the factor of 1010 by which the acetolysis of 1-AdOTs at 70° exceeded that of 1-NorOTs. The fragmentation of 1-NorOCCl to the ion pair was 3 + 1015 times faster than the acetolysis of 1-NorOTs. The activation energies were measured as 9.0 kcal/mol (log A = 11.2 s-1) for the fragmentation of 1-NorOCCl and 4.4 kcal/mol (log A = 8.44 s-1) for that of 1-BcoOCCl both in DCE. B3LYP/6-31G\* computed activation energies in simulated DCE were 14.6 and 2.7 kcal/mol, resp.

IT 433713-18-9

RL: CPS (Chemical process); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent) (carbene mechanistic reaction intermediate; erasing 1010 kinetic preference and bridgehead carbocations via carbene fragmentation)

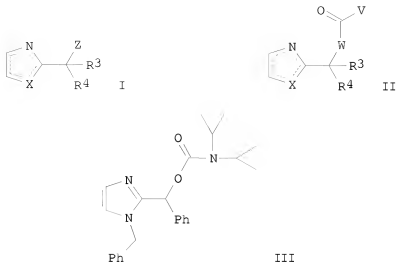
RN 433713-18-9 CAPLUS

CN Methylene, chloro(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yloxy)- (9CI) (CA INDEX NAME)

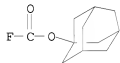
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 37 OF 163 CAPLUS COPYRIGHT 2008 ACS on SIN  
 ACCESSION NUMBER: 2001:904116 CAPLUS  
 DOCUMENT NUMBER: 136:37606  
 TITLE: Synthesis of 2-substituted azoles via multicomponent reactions.  
 INVENTOR(S): Hlasta, Dennis  
 PATENT ASSIGNEE(S): Ortho-McNeil Pharmaceutical, Inc., USA  
 SOURCE: PCT Int. Appl., 80 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001094318	A2	20011213	WO 2001-US16727	20010522
WO 2001094318	A3	20020718		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002042520	A1	20020411	US 2001-862808	20010522
US 6951948	B2	20051004		
PRIORITY APPLN. INFO.:		US 2000-209252P		P 20000605
OTHER SOURCE(S):		CASREACT 136:37606; MARPAT 136:37606		



- AB Title compds. [I; X = NH, NRa, S; Z = ORa, NRaRb, SR, cyano, N3, etc.; R3 = H, alkyl, (substituted) aralkyl, cycloalkyl, fluoroalkyl, COR, CO2R, etc.; R4 = alkyl, aryl, aralkyl, cycloalkyl, fluoroalkyl, alkenyl, alkynyl, COR, etc.; Ra, Rb = H, R, CO2R, COR, SO2R, SOR, etc.; R = alkyl, (substituted) aralkyl, cycloalkyl, adamantyl, norbornyl, fluoroalkyl, heterocyclyl], were prepared by treatment of the corresponding unsubstituted azoles with ACOV (A = F, Cl, Br, OCOCMe3; V = sterically hindered group) and then with R3C(:W)R4 (W = O, NSO2R, NSOR, NCOR, NCO2R, NR; R as above) to give compds. (II; variables as above) followed by optional treatment of II with ZH (Z as above). Thus, 1-benzylimidazole in MeCN at 0° was treated sequentially with diisopropylcarbamoyl chloride in MeCN, PhCHO, and diisopropylethylamine followed by 24 h reflux to give 78% title compound (III).
- IT 62087-82-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(synthesis of 2-substituted azoles via multicomponent reactions)
- RN 62087-82-5 CAPLUS
- CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



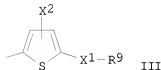
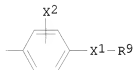
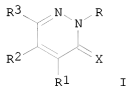
L4 ANSWER 38 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2001:772163 CAPLUS  
 DOCUMENT NUMBER: 135:318510  
 TITLE: Preparation of arylpyridazinones as prostaglandin  
 endoperoxide H synthase biosynthesis inhibitors  
 Black, Lawrence A.; Basha, Anwer; Kolasa, Teodozyj;  
 INVENTOR(S): Kort, Michael E.; Liu, Huaqing; McCarty, Catherine M.;

Patel, Meena; Rohde, Jeffrey J.; Coghlan, Michael J.;  
 Stewart, Andrew O.  
 PATENT ASSIGNEE(S): Abbott Laboratories, USA  
 SOURCE: U.S., 129 pp., Cont.-in-part of U.S. Ser. No. 261,872,  
 abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6307047	B1	20011023	US 1999-427768	19991027
TR 200000478	T2	20020422	TR 2000-478	19980810
CA 2347982	A1	20000504	CA 1999-2347982	19991027
WO 2000024719	A1	20000504	WO 1999-US25234	19991027
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9965230	A	20000515	AU 1999-65230	19991027
AU 773237	B2	20040520		
EP 1124804	A1	20010822	EP 1999-953259	19991027
EP 1124804	B1	20050824		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9914858	A	20020205	BR 1999-14858	19991027
TR 200101765	T2	20020221	TR 2001-1765	19991027
HU 2001005248	A2	20020729	HU 2001-5248	19991027
HU 2001005248	A3	20020930		
JP 2003512292	T	20030402	JP 2000-578289	19991027
AT 302759	T	20050915	AT 1999-953259	19991027
ES 2249919	T3	20060401	ES 1999-953259	19991027
ZA 2001003310	A	20020723	ZA 2001-3310	20010423
NO 2001002061	A	20010627	NO 2001-2061	20010426
NO 318623	B1	20050418		
BG 105523	A	20011231	BG 2001-105523	20010519
BG 65261	B1	20071031		
US 2002013318	A1	20020131	US 2001-871195	20010531
US 2002028938	A1	20020307	US 2001-870838	20010531
HK 1041876	A1	20060623	HK 2002-101207	20020219
US 2003225276	A1	20031204	US 2003-417959	20030417
US 7001895	B2	20060221		
US 2004158064	A1	20040812	US 2003-464928	20030619
US 7115591	B2	20061003		
PRIORITY APPLN. INFO.:				
			US 1997-56733P	P 19970822
			US 1998-129570	B2 19980805
			US 1998-137457	B2 19980820
			US 1998-179605	B2 19981027
			US 1999-261872	B2 19990303
			US 1997-917023	A 19970822
			US 1999-298490	A 19990423

US 1999-427768	A 19991027
WO 1999-US25234	W 19991027
US 2001-870838	B3 20010531
US 2001-871195	B3 20010531

OTHER SOURCE(S): MARPAT 135:318510  
GI



AB The title compds. [I; X = O, S, NR<sub>4</sub>, etc.; R<sub>4</sub> = alkyl, alkenyl, cycloalkyl, etc.; R = H, alkyl, alkenyl, etc.; at least one of R<sub>1</sub>-R<sub>3</sub> = II-III (wherein X<sub>1</sub> = SO<sub>2</sub>, SO(NR<sub>10</sub>), SO, etc.; R<sub>9</sub> = alkyl, alkenyl, alkynyl, etc.; X<sub>2</sub> = H, halo, alkyl, etc.; R<sub>10</sub> = H, alkyl, cycloalkyl); the remaining two of the groups of R<sub>1</sub>-R<sub>3</sub> = H, OH, hydroxyalkyl, etc.] which are cyclooxygenase (COX) inhibitors, and in particular, are selective inhibitors of cyclooxygenase-2 (COX-2), and therefore are useful in treating pain, fever, inflammation, rheumatoid arthritis, and osteoarthritis, were prepared Thus, oxidation of

2-benzyl-4-(4-fluorophenyl)-5-

[4-(methylthio)phenyl]-3(2H)-pyridazinone (preparation given) with MeCO<sub>3</sub>H in CH<sub>2</sub>Cl<sub>2</sub> afforded 86% I [X = O; R = PhCH<sub>2</sub>; R<sub>1</sub> = 4-FC<sub>6</sub>H<sub>4</sub>; R<sub>2</sub> = 4-(MeSO<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>; R<sub>3</sub> = H], which showed IC<sub>50</sub> of 0.014 μM against COX-2. COX-2 is the inducible isoform associated with inflammation, as opposed to the constitutive isoform, cyclooxygenase-1 (COX-1) which is an important "housekeeping" enzyme in many tissues, including the gastrointestinal (GI) tract and the kidneys. The selectivity of the compds. I for COX-2 minimizes the unwanted GI and renal side-effects seen with currently marketed non-steroidal anti-inflammatory drugs (NSAIDs).

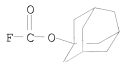
IT 62087-82-5, 1-Adamantyl fluoroformate

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation of arylpyridazinones as prostaglandin endoperoxide H synthase biosynthesis inhibitors)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

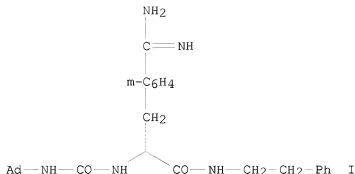


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 39 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2001:597948 CAPLUS  
 DOCUMENT NUMBER: 135:167033  
 TITLE: Synthesis of arginine mimetics as factor Xa inhibitors for use in anti-coagulation or antitumor therapy or as diagnostic material  
 INVENTOR(S): Moroder, Luis; Sperl, Stefan; Sturzebecher, Jorg  
 PATENT ASSIGNEE(S): Germany  
 SOURCE: PCT Int. Appl., 65 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001058859	A1	20010816	WO 2001-EP1423	20010209
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
DE 10005631	A1	20010823	DE 2000-10005631	20000209
CA 2399395	A1	20020730	CA 2001-2399395	20010209
EP 1272458	A1	20030108	EP 2001-916979	20010209
EP 1272458	B1	20071205		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
AU 782995	B2	20050915	AU 2001-44127	20010209
AT 380174	T	20071215	AT 2001-916979	20010209
US 2003021773	A1	20030130	US 2002-182706	20020807
US 7038074	B2	20060502		
US 2006189689	A1	20060824	US 2006-400374	20060410
PRIORITY APPLN. INFO.:			DE 2000-10005631	A 20000209
			WO 2001-EP1423	W 20010209
			US 2002-182706	A3 20020807

OTHER SOURCE(S): MARPAT 135:167033  
 GI

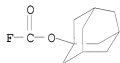


AB Title compds. (e.g. I.HCl) were prepared as DL-, D- or L-compds. and tested as factor Xa inhibitors for use as anticoagulants. Stereochem. of starting cyanophenylalanine determined the stereochem. of the product. Thus DL-(3-cyano)phenylalanine was BOC-protected [BOC = (CH<sub>3</sub>)<sub>3</sub>CO-C(=O)-], reacted with hydroxylamine hydrochloride to give the hydroxyamidine, N-dehydroxylated, either esterified or amidified, BOC-deprotected, and coupled with 1-adamantyl isocyanate to give a DL-I-type product. In in vitro inhibition tests I had K<sub>i</sub> 0.025 μM for factor Xa, >1000 for uPA, 0.9 for thrombin, 7 for trypsin, and 37 for plasmin.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of amino acid amidine or guanidine derivs. for use as factor Xa inhibitors for therapeutic or diagnostic use)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 40 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2000:758593 CAPLUS  
 DOCUMENT NUMBER: 134:85927  
 TITLE: New Kinetics Methodologies Applied to Carbene Fragmentation Reactions  
 AUTHOR(S): Moss, Robert A.; Johnson, Lauren A.; Yan, Shunqi; Toscano, John P.; Showalter, Brett M.  
 CORPORATE SOURCE: Department of Chemistry, Rutgers The State University of New Jersey, New Brunswick, NJ, 08903, USA  
 SOURCE: Journal of the American Chemical Society (2000), 122(45), 11256-11257  
 CODEN: JACSAT; ISSN: 0002-7863  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal

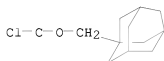
LANGUAGE: English

AB LFP-Time Resolved IR spectroscopy (TRIR) kinetics were conducted on chloro(alkylmethoxy)carbene precursors 3-benzyloxy-3-chlorodiazirine and 3-(1-adamantylmethoxy)-3-chlorodiazirine, by monitoring the formation of CO. Activation parameters were determined B3LYP DFT calcs. support the mechanism which suggests that the (1-adamantylmethoxy)chlorocarbene fragmentation involves a concerted ring expansion of the 1-adamantylmethyl group directly to the homoadamantyl cation.

IT 182802-27-3  
 RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent) (fragmentation kinetics of alkoxychlorocarbenes)

RN 182802-27-3 CAPLUS

CN Methylene, chloro(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethoxy)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 41 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:725590 CAPLUS

DOCUMENT NUMBER: 133:266309

TITLE: Method for the production of substituted aliphatic fluoroformates by the esterification of phosgen with an aliphatic alcohol in the presence of powdered sodium fluoride

INVENTOR(S): Delabrouille, Philippe; Grenouillat, Denis; Senet, Jean-Pierre; Sennyey, Gerard

PATENT ASSIGNEE(S): Isochem, Fr.

SOURCE: PCT Int. Appl., 24 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000059859	A1	20001012	WO 2000-FR662	20000317
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2791669	A1	20001006	FR 1999-4125	19990402
FR 2791669	B1	20010504		



CA 2369062	A1	20001012	CA 2000-2369062	20000317
BR 2000009499	A	20020102	BR 2000-9499	20000317
EP 1165483	A1	20020102	EP 2000-910982	20000317
EP 1165483	B1	20040303		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
HU 2002000712	A2	20020629	HU 2002-712	20000317
HU 2002000712	A3	20040329		
JP 2003512297	T	20030402	JP 2000-609373	20000317
EP 1394145	A1	20040303	EP 2003-26475	20000317
EP 1394145	B1	20060329		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
AT 260884	T	20040315	AT 2000-910982	20000317
CN 1680268	A	20051012	CN 2005-10070271	20000317
AT 321749	T	20060415	AT 2003-26475	20000317
ES 2259126	T3	20060916	ES 2003-26475	20000317
IN 2001MN00985	A	20050819	IN 2001-MN985	20010816
US 6858751	B1	20050222	US 2001-937276	20010924
MX 2001PA09907	A	20020225	MX 2001-PA9907	20011001

PRIORITY APPLN. INFO.:

FR 1999-4125	A	19990402
CN 2000-805726	A3	20000317
EP 2000-910982	A3	20000317
WO 2000-FR662	W	20000317

OTHER SOURCE(S): CASREACT 133:266309

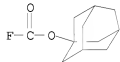
AB A method for the production of aliphatic fluoroformates, where carbonyl fluoride

is esterified with aliphatic alcs. (e.g., tert-butanol) in an ether at -20° to +50°, is described. The method is carried out using carbonyl fluoride obtained by reacting phosgene with surplus powdered sodium fluoride whose granules have a sp. surface of ≥0.1 m<sup>2</sup>/g and/or an average diameter of ≤20 mm. This method enables the preparation of unstable fluoroformates (e.g., tert-Bu fluoroformate) in excellent yields.

IT 62087-82-5P, 1-Adamantyl fluoroformate

RL: SPN (Synthetic preparation); PREP (Preparation) (method for the production of substituted aliphatic fluoroformates by the esterification of phosgene with an aliphatic alc. in the presence of powdered sodium fluoride)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 42 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:646001 CAPLUS

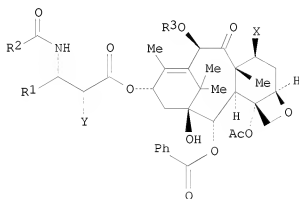
DOCUMENT NUMBER: 133:238151

TITLE: Preparation of taxoid compounds as osteogenesis promoters

INVENTOR(S): Ishizuya, Toshinori; Ikuta, Shunichi; Uzawa, Toyonobu;  
Hori, Masayuki  
PATENT ASSIGNEE(S): Asahi Kasei Kogyo Kabushiki Kaisha, Japan  
SOURCE: PCT Int. Appl., 152 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000053592	A1	20000914	WO 2000-JP1334	20000306
<p>W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p> <p>RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG</p>				
JP 2003026673	A	20030129	JP 1999-59415	19990305
PRIORITY APPLN. INFO.:			JP 1999-59415	A 19990305
OTHER SOURCE(S):	MARPAT 133:238151			

GI



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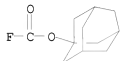
AB Claimed are osteogenesis promoters containing taxoids represented by general formula (I) in amts. effective for osteogenesis (wherein X and Y are each independently hydroxyl or a group convertible into hydroxyl in vivo; R1 is alkyl, alkenyl, alkynyl, Ph, naphthyl, furyl, or thienyl; R2 is alkyl, Ph, naphthyl, furyl, thienyl, alkoxy, or alkylamino; and R3 is hydrogen, alkyl, alkylcarbonyl, benzoyl, naphthoyl, furyl, thenoyl, alkoxycarbonyl, or dialkylcarbonyl) for the treatment of bone fracture and bone loss due to surgical bone removal. Thus, de-N-benzoyl-3'-desphenyl-3'-isobutylpaclitaxel (preparation given) was acylated by di-tert-amyl dicarbonate in a mixture of EtOAc and saturated aqueous NaHCO<sub>3</sub> at room temperature for 5 h to give  
de-N-benzoyl-N-tert-amylloxycarbonyl-3'-desphenyl-3'-isobutylpaclitaxel

(II). II in vitro increased number of bone nodules formed in rat osteoblastic cell from  $5.3 \pm 5.2$  (control) to 25, 64, and 97/well at 0.3, 1, and 4 ng/mL, resp.

IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of taxoid compds. as osteogenesis promoters for treatment of bone fracture and bone loss due to surgical bone removal)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 43 OF 163 CAPLUS COPYRIGHT 2008 ACS on SIN

ACCESSION NUMBER: 2000:477081 CAPLUS

DOCUMENT NUMBER: 133:119933

TITLE: Dual pathways in the solvolyses of isopropyl chloroformate

AUTHOR(S): Kyong, Jin Burm; Kim, Yong-Gun; Kim, Dong Kook; Kevill, Dennis N.

CORPORATE SOURCE: Department of Chemistry, Hanyang University, Kyunggi-Do, 425-791, S. Korea

SOURCE: Bulletin of the Korean Chemical Society (2000), 21(6), 662-664

CODEN: BKCSDE; ISSN: 0253-2964

PUBLISHER: Korean Chemical Society

DOCUMENT TYPE: Journal

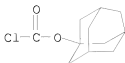
LANGUAGE: English

AB The authors report the application of the extended Grunwald-Winstein equation to the solvolyses of secondary isoPr chloroformate in a wide range of solvent types. The specific rates for the solvolyses of primary, secondary, and tertiary alkyl chloroformate were also examined in terms of the extended Grunwald-Winstein LFER. IsoPr chloroformate provides evidence for 2 competing reaction channels. The solvolyses of isoPr chloroformate proceed by an ionizing pathway in all but the more nucleophilic and least ionizing solvents. In the more nucleophilicity-least ionizing combination (EtOH, 90% EtOH, MeOH and 90% MeOH) there is evidence for a dominant addition-elimination pathway. This behavior is very similar to those analyzed of the specific rates for solvolyses of Et chlorothioformate over a wide range of solvents.

IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
 (dual pathways in solvolyses of iso-Pr chloroformate)

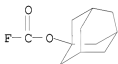
RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 44 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2000:417316 CAPLUS  
 DOCUMENT NUMBER: 133:208130  
 TITLE: (R,R,R)-2,5-Diaminocyclohexanecarboxylic Acid, a Building Block for Water-Soluble, Helix-Forming  $\beta$ -Peptides  
 AUTHOR(S): Appella, Daniel H.; LePlae, Paul R.; Raguse, Tami L.; Gellman, Samuel H.  
 CORPORATE SOURCE: Department of Chemistry, University of Wisconsin, Madison, WI, 53706-1396, USA  
 SOURCE: Journal of Organic Chemistry (2000), 65(15), 4766-4769  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 133:208130  
 AB A synthesis of a protected form of (R,R,R)-2,5-diaminocyclohexanecarboxylate is reported. Addnl., an improved synthesis of (R,R)-2-aminocyclohexanecarboxylate is described.  
 IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent) (stereoselective preparation of aminocyclohexanecarboxylate)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

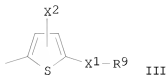
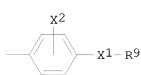
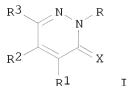


REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

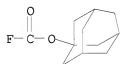
L4 ANSWER 45 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2000:291005 CAPLUS  
 DOCUMENT NUMBER: 132:321867  
 TITLE: Preparation of arylpyridazinones as prostaglandin endoperoxide H synthase biosynthesis inhibitors  
 INVENTOR(S): Black, Lawrence A.; Basha, Anwer; Kolasa, Teodozyj; Kort, Michael E.; Liu, Huaqing; McCarty, Catherine M.; Patel, Meena V.; Rohde, Jeffrey J.; Coghlan, Michael J.; Stewart, Andrew O.  
 PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 477 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000024719	A1	20000504	WO 1999-US25234	19991027
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2347982	A1	20000504	CA 1999-2347982	19991027
AU 9965230	A	20000515	AU 1999-65230	19991027
AU 773237	B2	20040520		
EP 1124804	A1	20010822	EP 1999-953259	19991027
EP 1124804	B1	20050824		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6307047	B1	20011023	US 1999-427768	19991027
BR 9914858	A	20020205	BR 1999-14858	19991027
JP 2003512292	T	20030402	JP 2000-578289	19991027
AT 302759	T	20050915	AT 1999-953259	19991027
ZA 2001003310	A	20020723	ZA 2001-3310	20010423
IN 2001MN00450	A	20070914	IN 2001-MN450	20010423
NO 2001002061	A	20010627	NO 2001-2061	20010426
NO 318623	B1	20050418		
MX 2001PA04247	A	20010910	MX 2001-PA4247	20010427
BG 105523	A	20011231	BG 2001-105523	20010519
BG 65261	B1	20071031		
HK 1041876	A1	20060623	HK 2002-101207	20020219
PRIORITY APPLN. INFO.:			US 1998-179605	A 19981027
			US 1999-261872	A 19990303
			US 1999-298490	A 19990423
			US 1999-427768	A 19991027
			US 1997-56733P	P 19970822
			US 1998-129570	B2 19980805
			US 1998-137457	B2 19980820
			WO 1999-US25234	W 19991027
OTHER SOURCE(S):		MARPAT 132:321867		
GI				



- AB The title compds. [I; X = O, S, NR<sub>4</sub>, etc.; R<sub>4</sub> = alkyl, alkenyl, cycloalkyl, etc.; R = H, alkyl, alkenyl, etc.; at least one of R<sub>1</sub>-R<sub>3</sub> = II-III (wherein X<sub>1</sub> = SO<sub>2</sub>, SO(NR<sub>10</sub>), SO, etc.; R<sub>9</sub> = alkyl, alkenyl, alkynyl, etc.; X<sub>2</sub> = H, halo, alkyl, etc.; R<sub>10</sub> = H, alkyl, cycloalkyl); the remaining two of the groups of R<sub>1</sub>-R<sub>3</sub> = H, OH, hydroxyalkyl, etc.] which are cyclooxygenase (COX) inhibitors, and in particular, are selective inhibitors of cyclooxygenase-2 (COX-2), and therefore are useful in treating pain, fever, inflammation, rheumatoid arthritis, osteoarthritis, adhesions, and cancer, were prepared. Thus, oxidation of 2-benzyl-4-(4-fluorophenyl)-5-[4-(methylthio)phenyl]-3(2H)-pyridazinone (preparation given) with MeCO<sub>3</sub>H in CH<sub>2</sub>Cl<sub>2</sub> afforded 86% I [X = O; R = PhCH<sub>2</sub>; R<sub>1</sub> = 4-FC<sub>6</sub>H<sub>4</sub>; R<sub>2</sub> = 4-(MeSO<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>; R<sub>3</sub> = H], which showed 0.014 μM against COX-2. COX-2 is the inducible isoform associated with inflammation, as opposed to the constitutive isoform, cyclooxygenase-1 (COX-1) which is an important "housekeeping" enzyme in many tissues, including the gastrointestinal (GI) tract and the kidneys. The selectivity of the compds. I for COX-2 minimizes the unwanted GI and renal side-effects seen with currently marketed non-steroidal anti-inflammatory drugs (NSAIDs).
- IT 62087-82-5, 1-Adamantyl fluoroformate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reactant; preparation of arylpyridazinones as prostaglandin endoperoxide H synthase biosynthesis inhibitors)
- RN 62087-82-5 CAPLUS
- CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



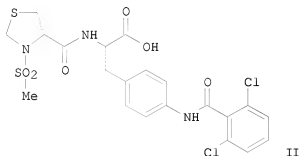
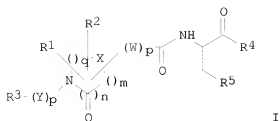
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 46 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1999:819360 CAPLUS  
DOCUMENT NUMBER: 132:64524  
TITLE: Preparation of N-thiazolidinylcarbonylphenylalanine

derivatives and analogs as inhibitors of  
 $\alpha 4 \beta 1$  mediated cell adhesion

INVENTOR(S): Blinn, James R.; Chrusciel, Robert A.; Fisher, Jed F.;  
 Tanis, Steven P.; Thomas, Edward William; Lobl, Thomas  
 J.; Teegarden, Bradley R.  
 PATENT ASSIGNEE(S): Pharmacia and Upjohn Company, USA; Tanabe Seiyaku Co.,  
 Ltd.  
 SOURCE: PCT Int. Appl., 308 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9967230	A1	19991229	WO 1999-US14233	19990623
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
TW 591026	B	20040611	TW 1999-88110444	19990622
CA 2342778	A1	19991229	CA 1999-2342778	19990623
AU 9947116	A	20000110	AU 1999-47116	19990623
AU 764553	B2	20030821		
EP 1089989	A1	20010411	EP 1999-930614	19990623
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
JP 2002518491	T	20020625	JP 2000-555884	19990623
NZ 509010	A	20021025	NZ 1999-509010	19990623
MX 2000PA12765	A	20020424	MX 2000-PA12765	20001219
US 6685617	B1	20040203	US 2001-720088	20010309
PRIORITY APPLN. INFO.:			US 1998-90421P	P 19980623
			WO 1999-US14233	W 19990623
OTHER SOURCE(S):	MARPAT 132:64524			
GI				



AB Title compds. (I) [wherein m = 1 or 2; n and p = independently 0 or 1; q = 1-3; R1 = independently H or alkyl for 1-4 occurrences; R2 = H, pyridyl, alkyl, or carboxy(alkyl); or R1 and R2 may be attached to the same C and form a 5-8 membered carbocyclic or azacyclic ring; R3 = H, Ph, (aryl)alkyl, alkenyl, carboxy(alkyl), acylalkyl, alkoxyalkyl, hydroxy(alkyl), cyano(alkyl), adamantyl, or a variety of (un)substituted (hetero)aryl or (hetero)cyclic groups; R4 = OH, alkoxy, NH2, NHOH, alkylaryloxy, or pyridylmethoxy; R5 = (un)substituted Ph or pyridyl; W = Cl-6 alkyl; X = S, O, or CH2; Y = C(O), C(O)O, SO2, or (un)substituted C(O)NH], pharmaceutically acceptable salts and stereoisomers thereof, were prepared as inhibitors of  $\alpha 4\beta 1$  mediated adhesion to either the vascular cell adhesion mol. (VCAM-1) or the CS-1 domain of fibronectin and are useful in the treatment of inflammatory diseases. Approx. 290 invention compds. and their intermediates were prepared via traditional or solid phase synthetic methods. For instance, II was synthesized in a 6-step sequence involving (1) cyclization of D-cysteine.HCl with HCHO to form (S)-3-thiazolidinecarboxylic acid, (2) N-protection with di-t-Bu dicarbonate, (3) amidation with 4-[(2,6-dichlorobenzoyl)amino]-L-phenylalanine Me ester, (4) N-deprotection with HCl, (5) N-mesylation, and (6) deesterification with aqueous NaOH, followed by work up, chromatog., and lyophilization. In vitro cell adhesion inhibitory and/or modulatory activities were reported for approx. 270 invention compds. tested in Jurkat CS-1 and/or Jurkat endothelial cell (EC) adhesion inhibition assays. Nine of the 21 compds. assayed showed > 40% inhibition of VLA-4 integrin-dependent eosinophil infiltration against acute inflammation and are expected to be useful in the treatment of asthma and other VLA-4 mediated diseases.

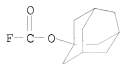
IT 62087-82-5, 1-Adamantyl fluoroformate

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation of N-thiazolidinylcarbonylphenylalanine derivs. and analogs as inhibitors of  $\alpha 4\beta 1$  mediated cell adhesion)

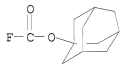
RN 62087-82-5 CAPLUS



CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 47 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999:628930 CAPLUS  
 DOCUMENT NUMBER: 132:12343  
 TITLE: Formation and Reactions of Lithium Ester Silenolates: Silicon Analogues of Lithium Ester Enolates  
 Ohshita, Joji; Sakurai, Hideaki; Tokunaga, Yoshiaki; Kunai, Atsutaka  
 AUTHOR(S):  
 CORPORATE SOURCE: Department of Applied Chemistry Faculty of Engineering, Hiroshima University, Higashi-Hiroshima, 739-8527, Japan  
 SOURCE: Organometallics (1999), 18(22), 4545-4551  
 CODEN: ORGND7; ISSN: 0276-7333  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Treatment of cyclohexyl, adamantyl, and benzyl tris(trimethylsilyl)silanecarboxylates with tris(trimethylsilyl)silyllithium afforded the corresponding Li ester silenolates by Li-Me3Si exchange. The Li ester silenolates thus prepared reacted readily with electrophiles including H<sub>2</sub>O, alkyl halides, and chlorosilanes to produce Si-substituted products. Oxidative coupling of the Li ester silenolates with Pd dichloride gave polysilane-1,2-dicarboxylates. With mesitaldehyde, a Li ester silenolate produced products arising from addition of the ester silenolate across the carbonyl bond of the aldehyde.  
 IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and reactions of lithium ester silenolates)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 48 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999:576920 CAPLUS  
 DOCUMENT NUMBER: 131:199851

TITLE: Synthesis of paclitaxel by protecting the 7-hydroxyl of baccatin III using a strong base and an electrophile

INVENTOR(S): Gibson, Francis S.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA

SOURCE: PCT Int. Appl., 33 pp.  
CODEN: PIXXD2

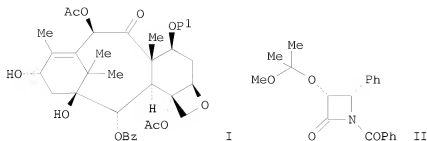
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9945001	A1	19990910	WO 1999-US3874	19990223
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6020507	A	20000201	US 1999-252956	19990218
CA 2319043	A1	19990910	CA 1999-2319043	19990223
AU 9933078	A	19990920	AU 1999-33078	19990223
AU 759988	B2	20030501		
EP 1060172	A1	20001220	EP 1999-937928	19990223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
HU 2001002079	A2	20011228	HU 2001-2079	19990223
HU 2001002079	A3	20020429		
JP 2002505326	T	20020219	JP 2000-534544	19990223
IL 156620	A	20050517	IL 1999-156620	19990223
US 6307071	B1	20011023	US 2000-496310	20000201
MX 2000PA08050	A	20010405	MX 2000-PA8050	20000817
AU 2003231609	A1	20030911	AU 2003-231609	20030731
PRIORITY APPLN. INFO.:			US 1998-76493P	P 19980302
			US 1999-252956	A1 19990218
			IL 1999-137850	A3 19990223
			WO 1999-US3874	W 19990223
OTHER SOURCE(S):		CASREACT 131:199851; MARPAT 131:199851		
GI				



AB The process for synthesizing paclitaxel is disclosed where baccatin III is treated with a strong base in a solvent, adding an electrophile to the solution to form a 7-O-protected baccatin III derivative of formula I [P1 = protecting group], reacting the 7-O-protected baccatin III derivative with a protected paclitaxel sidechain in a solvent such that the protected paclitaxel sidechain is coupled to the 13-hydroxyl of the 7-O-protected baccatin III, and subsequently deprotecting the protected paclitaxel sidechain and the 7-O protecting group to form paclitaxel. Thus, baccatin III was treated with LiHMDS and 2,2,2-trichloroethoxycarbonyl chloride, then II and LiHMDS were added to the protected compound, then deprotected to give paclitaxel.

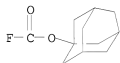
IT 62087-82-5, Adamantyl fluoroformate

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis of paclitaxel via protection of baccatin III with an electrophile and a strong base)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 49 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:523673 CAPLUS

DOCUMENT NUMBER: 131:242869

TITLE: Kinetics on the reaction of 1-adamantyl fluoroformate with substituted pyridines

AUTHOR(S): Park, Byoung-Chun; Park, Soo Hyun; Kyong, Jin Burm; Kim, Chang-Bae

CORPORATE SOURCE: Department of Chemistry, Hanyang University, Ansan, 425-791, S. Korea

SOURCE: Journal of the Korean Chemical Society (1999), 43(4), 456-460

CODEN: JKCSEZ; ISSN: 1017-2548

PUBLISHER: Korean Chemical Society

DOCUMENT TYPE: Journal

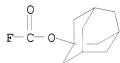
LANGUAGE: Korean

AB Rates of Menschutkin reaction of 1-adamantyl fluoroformate with substituted pyridines [3-CH<sub>3</sub>, 4-CH<sub>3</sub>, H, 3-Cl, 3,4-(CH<sub>3</sub>)<sub>2</sub>, 3,5-(CH<sub>3</sub>)<sub>2</sub>] in methanol have been measured by conductometric method at various temps. and concns. The activation parameters (AH, AS) and Hammett reaction constant (ρ) and Bronsted coefficient (β) were evaluated from rate consts. The activation entropies are large and neg., and the activation enthalpies are small and pos. The Hammett reaction constant (ρ) and Bronsted coefficient (β) values were -4.15 and 0.63, resp. From the above results, it may be concluded that this reaction proceeds to a concerted displacement mechanism in methanol.

IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
 (kinetics of Menschutkin reaction of 1-adamantyl fluoroformate with substituted pyridines)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 50 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:405836 CAPLUS

DOCUMENT NUMBER: 131:213812

TITLE: A novel synthesis of trifluoromethyl ethers via xanthates, utilizing BrF<sub>3</sub>

AUTHOR(S): Ben-David, Iris; Rechavi, Dalit; Mishani, Eyal; Rozen, Shlomo

CORPORATE SOURCE: Raymond and Beverly Sackler Faculty of Exact Sciences, School of Chemistry, Tel-Aviv University, Tel-Aviv, 69978, Israel

SOURCE: Journal of Fluorine Chemistry (1999), 97(1-2), 75-78  
 CODEN: JFLCAR; ISSN: 0022-1139

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal

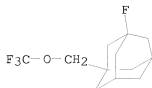
LANGUAGE: English

AB Alcs. were transformed into trifluoromethyl ethers by converting them to xanthates in almost quant. yield and following with a BrF<sub>3</sub> reaction.

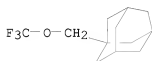
IT 242795-34-2P 242795-40-0P 242795-41-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of trifluoromethyl ethers by reaction of xanthates with bromine trifluoride)

RN 242795-34-2 CAPLUS

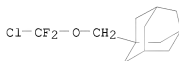
CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-fluoro-3-[(trifluoromethoxy)methyl]- (CA INDEX NAME)



RN 242795-40-0 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(trifluoromethoxy)methyl]- (CA INDEX NAME)



RN 242795-41-1 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chlorodifluoromethoxy)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

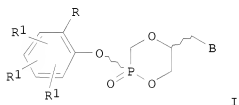
L4 ANSWER 51 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999:205356 CAPLUS  
 DOCUMENT NUMBER: 130:209927  
 TITLE: Preparation of nucleotide phosphonate ester analogs as antiviral agents  
 INVENTOR(S): Arimilli, Murty N.; Bischofberger, Norbert W.; Jones, Robert J.; Lee, William A.; Prisbe, Ernest J.  
 PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA  
 SOURCE: U.S., 36 pp., Cont.-in-part of U.S. Ser. No. 193,341, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5886179	A	19990323	US 1995-581147	19951229
US 5656745	A	19970812	US 1993-123483	19930917
CA 2239020	A1	19970710	CA 1996-2239020	19961213
WO 9724361	A1	19970710	WO 1996-US20226	19961213

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,

LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,  
 SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN  
 RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,  
 MR, NE, SN, TD, TG

AU 9714270	A	19970728	AU 1997-14270	19961213
EP 874858	A1	19981104	EP 1996-944469	19961213
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
NZ 325704	A	20000228	NZ 1996-325704	19961213
JP 2000503640	T	20000328	JP 1997-524416	19961213
BR 9612317	A	20001031	BR 1996-12317	19961213
JP 2006182779	A	20060713	JP 2005-361122	20051214
JP 2006290898	A	20061026	JP 2006-159159	20060607
JP 2006306882	A	20061109	JP 2006-159160	20060607
PRIORITY APPLN. INFO.:			US 1993-123483	A2 19930917
			US 1994-193341	B2 19940208
			JP 1995-509394	A3 19940916
			US 1995-581147	A 19951229
			US 1995-9372P	P 19951229
			US 1995-9375P	P 19951229
			WO 1996-US20226	W 19961213
OTHER SOURCE(S):			MARPAT 130:209927	
GI				

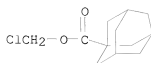


AB Nucleotide phosphonate esters I (B = 5-fluorocytosin-1-yl, 5-methylcytosin-1-yl, heterocycle; R = S(O<sub>2</sub>N(R<sub>3</sub>)<sub>2</sub>; R<sub>1</sub> = H, CN, nitro, alkyl, -O-alkyl, acyl, SO<sub>3</sub>H, amine, CHO; R<sub>3</sub> = H, alkyl, Ph, substituted Ph) characterized by the presence of an ester linked group which is bonded to the phosphorus atom of phosphonate nucleotide analogs are prepared as virucides. The analogs comprise an ester bond that is hydrolyzed in vivo to yield a corresponding phosphonate nucleotide analog. Thus, (R)-9-(2-di-2-ethoxyphenylphosphonylmethoxypropyl)adenine was prepared and tested for its HSV-1 and HSV-2 antiviral activities (EC<sub>50</sub> = 3 μM).

IT 71570-32-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of nucleotide phosphonate ester analogs as antiviral agents)

RN 71570-32-6 CAPLUS

CN Tricyclo[3.3.1.1.3,7]decane-1-carboxylic acid, chloromethyl ester (CA INDEX NAME)



REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 52 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999:166604 CAPLUS  
 DOCUMENT NUMBER: 130:223284  
 TITLE: Preparation of arylpyridazinones as prostaglandin endoperoxide H synthase biosynthesis inhibitors  
 INVENTOR(S): Black, Lawrence A.; Basha, Anwer; Kolasa, Teodozyj; Kort, Michael E.; Liu, Huaqing; McCarty, Catherine M.; Patel, Meena V.; Rohde, Jeffrey J.  
 PATENT ASSIGNEE(S): Abbott Laboratories, USA  
 SOURCE: PCT Int. Appl., 307 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9910331	A1	19990304	WO 1998-US16479	19980810
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2299300	A1	19990304	CA 1998-2299300	19980810
CA 2299300	C	20070417		
CA 2578858	A1	19990304	CA 1998-2578858	19980810
AU 9886976	A	19990316	AU 1998-86976	19980810
AU 741317	B2	20011129		
EP 1007515	A1	20000614	EP 1998-938451	19980810
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO				
BR 9812127	A	20000718	BR 1998-12127	19980810
TR 200000478	T2	20020422	TR 2000-478	19980810
JP 2003516925	T	20030520	JP 2000-507660	19980810
HU 2004000909	A2	20040728	HU 2004-909	19980810
HU 2004000909	A3	20041028		
IL 133552	A	20051218	IL 1998-133552	19980810
PL 194175	B1	20070531	PL 1998-355418	19980810
ZA 9807555	A	19990223	ZA 1998-7555	19980820
TW 232216	B	20050511	TW 1998-87113837	19980910
NO 2000000863	A	20000222	NO 2000-863	20000222
NO 315423	B1	20030901		

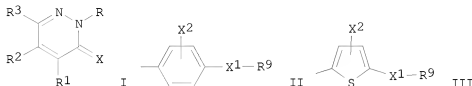
MX 200001850	A	20001030	MX 2000-1850	20000222
BG 104241	A	20001031	BG 2000-104241	20000315
BG 64675	B1	20051130		

PRIORITY APPLN. INFO.:

US 1997-917023	A	19970822
US 1998-129570	A	19980805
CA 1998-2299300	A3	19980810
WO 1998-US16479	W	19980810

OTHER SOURCE(S):                      MARPAT 130:223284

GI

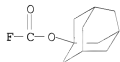


AB The title compds. [I; X = O, S, NR<sub>4</sub>, etc.; R<sub>4</sub> = alkyl, alkenyl, cycloalkyl, etc.; R = H, alkyl, alkenyl, etc.; at least one of R<sub>1</sub>-R<sub>3</sub> = II-III (wherein X<sub>1</sub> = SO<sub>2</sub>, SO(NR<sub>10</sub>), SO, etc.; R<sub>9</sub> = alkyl, alkenyl, alkylnyl, etc.; X<sub>2</sub> = H, halo, alkyl, etc.; R<sub>10</sub> = H, alkyl, cycloalkyl); the remaining two of the groups of R<sub>1</sub>-R<sub>3</sub> = H, OH, hydroxyalkyl, etc.] which are cyclooxygenase (COX) inhibitors, and in particular, are selective inhibitors of cyclooxygenase-2 (COX-2), and therefore are useful in treating pain, fever, inflammation, rheumatoid arthritis, osteoarthritis, adhesions, and cancer, were prepared. Thus, oxidation of 2-benzyl-4-(4-fluorophenyl)-5-[4-(methylthio)phenyl]-3(2H)-pyridazinone (preparation given) with MeCO<sub>3</sub>H in CH<sub>2</sub>Cl<sub>2</sub> afforded 86% I [X = O; R = PhCH<sub>2</sub>; R<sub>1</sub> = 4-FC<sub>6</sub>H<sub>4</sub>; R<sub>2</sub> = 4-(MeSO<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>; R<sub>3</sub> = H] which showed 0.014 μM against COX-2. COX-2 is the inducible isoform associated with inflammation, as opposed to the constitutive isoform, cyclooxygenase-1 (COX-1) which is an important "housekeeping" enzyme in many tissues, including the gastrointestinal (GI) tract and the kidneys. The selectivity of the compds. I for COX-2 minimizes the unwanted GI and renal side-effects seen with currently marketed non-steroidal anti-inflammatory drugs (NSAIDs).

IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of arylpyridazinones as prostaglandin endoperoxide H synthase biosynthesis inhibitors)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT:                      4                      THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

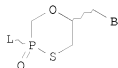
L4 ANSWER 53 OF 163 CAPLUS COPYRIGHT 2008 ACS on SIN



ACCESSION NUMBER: 1998:572292 CAPLUS  
 DOCUMENT NUMBER: 129:189610  
 TITLE: Preparation of amidate linked amino acid nucleotide analogs as antitumors and antiviral agents  
 INVENTOR(S): Bischofberger, Norbert W.; Jones, Robert J.; Arimilli, Murty N.; Louie, Michael S.; Frisbe, Ernest J.; Lee, William A.  
 PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA  
 SOURCE: U.S., 62 pp., Cont.-in-part of U.S. Ser. No. 193,341, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5798340	A	19980825	US 1996-617849	19960506
US 5656745	A	19970812	US 1993-123483	19930917
WO 9507920	A1	19950323	WO 1994-US10539	19940916
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5591851	A	19970107	US 1996-597005	19960205
US 5756486	A	19980526	US 1996-708596	19960905
US 6225460	B1	20010501	US 1999-247497	19990210
US 2001041794	A1	20011115	US 2001-801164	20010307
US 2004242465	A1	20041202	US 2004-882022	20040629
JP 2006182779	A	20060713	JP 2005-361122	20051214
JP 2006290898	A	20061026	JP 2006-159159	20060607
JP 2006306882	A	20061109	JP 2006-159160	20060607
PRIORITY APPLN. INFO.:			US 1993-123483	A2 19930917
			US 1994-193341	B2 19940208
			WO 1994-US10539	W 19940916
			US 1996-597005	A2 19960205
			JP 1995-509394	A3 19940916
			US 1996-617849	A3 19960506
			US 1998-71420	B1 19980501
			US 1999-247497	A1 19990210
			US 2001-801164	B1 20010307
			US 2004-778856	B1 20040213

OTHER SOURCE(S): MARPAT 129:189610  
 GI



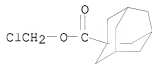
I

AB Nucleotide analogs I (B = nucleobase, L = amidite oxy ester, amidite thio ester) characterized by the presence of an amidate linked amino acid or an ester linked group which is bonded to the phosphorus atom of phosphonate nucleotide analogs are disclosed. The analogs comprise a phosphoramidate or ester bond that is hydrolyzed in vivo to yield a corresponding phosphonate nucleotide analog. Methods and intermediates for the synthesis and use are described. Thus, (R)-9-(2-di-2-ethoxyphenylphosphonylmethoxypropyl)adenine was prepared and tested for its antiviral HSV-1 and HSV-2 activities (EC50 = 3-200  $\mu$ M).

IT 71570-32-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of amidate linked amino acid nucleotide analogs as antitumors and antiviral agents)

RN 71570-32-6 CAPLUS

CN Tricyclo[3.3.1.1.3,7]decane-1-carboxylic acid, chloromethyl ester (CA INDEX NAME)



REFERENCE COUNT: 108 THERE ARE 108 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 54 OF 163 CAPLUS COPYRIGHT 2008 ACS on SIN

ACCESSION NUMBER: 1998:352629 CAPLUS

DOCUMENT NUMBER: 129:27954

TITLE: Quinazolinone derivatives as cholecystokinin (CCK) ligands

INVENTOR(S): Padia, Janak Khimchand

PATENT ASSIGNEE(S): Warner-Lambert Co., USA

SOURCE: U.S., 23 pp., Cont.-in-part of U.S. Ser. No. 287,454. CODEN: USXXAM

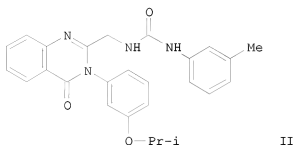
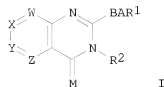
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 5756502	A	19980526	US 1995-500436	19950710
US 5869665	A	19990209	US 1997-826843	19970408
PRIORITY APPLN. INFO.:			US 1994-287454	A2 19940808
			US 1995-500436	A3 19950710
OTHER SOURCE(S):	CASREACT	129:27954; MARPAT	129:27954	
GI				

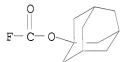


AB The title compds. [I; W, X, Y, Z = CR3, CR4, CR5, CR6, N, etc.; M = O, S; B = bond or (un)substituted alkylene; A = R1NCO(CH2)n, CONR11(CH2)n, etc.; n = 0, 1; R1, R2 = C1-6 alkyl, (un)substituted aryl, etc.; R3-R6 = H, OH, alkoxy, etc.; R11 = H, lower alkyl] are prepared I with good binding affinity for the CCK-A and CCK-B receptors are useful agents to suppress appetite, reduce gastric acid secretion, and the like. Thus, 2-(aminomethyl)-3-[3-(methylethoxy)phenyl]-4(3H)-quinazoline (preparation given) was reacted with 3-methylphenyl isocyanate to give 50% the title compound (II), which showed CCK-A and CCK-B receptor binding affinities (Ki) of 1637 and 879 nm resp.

IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (quinazolinone derivs. as cholecystokinin (CCK) ligands)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 55 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1998:323158 CAPLUS  
 DOCUMENT NUMBER: 129:16386  
 TITLE: Preparation of branched peptide linkers  
 INVENTOR(S): King, Dalton; Firestone, Raymond A.; Dubowchik, Gene M.  
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA  
 SOURCE: PCT Int. Appl., 120 pp.

DOCUMENT TYPE: CODEN: PIXXD2  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: 1 English  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9819705	A1	19980514	WO 1997-US19851	19971031
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2264610	A1	19980514	CA 1997-2264610	19971031
AU 9851597	A	19980529	AU 1998-51597	19971031
EP 941120	A1	19990915	EP 1997-946428	19971031
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001505194	T	20010417	JP 1998-521606	19971031
US 6759509	B1	20040706	US 1997-962348	19971031
PRIORITY APPLN. INFO.:			US 1996-30367P	P 19961105
			WO 1997-US19851	W 19971031

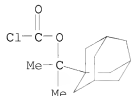
OTHER SOURCE(S): MARPAT 129:16386

AB Conjugates containing a targeting ligand, such as an antibody, a therapeutically active drug and a branched peptide linker are given. The branched peptide linker contains two or more amino acid moieties that provide an enzyme cleavage site. The number of drugs capable of being bonded to the branched linkers varies by a factor of two for each generation of branching. Compds. A-Wc-(CH<sub>2</sub>)<sub>a</sub>-(Q)p-(CO)d-E[(CH<sub>2</sub>)<sub>b</sub>-X]<sub>2</sub> (A = thiol acceptor, W = bridging moiety, c = integer 0-1, a = 2-12, Q = O, NH, alkylimino, p, d = 0-1, E = polyvalent atom, b = 1-10, X = CO-Y-Zm-Gn, where Y = two L-amino acid residues, m = 0-1, G = self-immolative spacer, n = 0-1), and related compds. with further branching at X, are claimed. Thus, syntheses of Met-IDP-[AA-Lys-PABC-DOX]<sub>2</sub> dichloroacetates [Met-IDP = N-maleoyl-N',N'-bis(carboxyethyl)ethylenediamine residue; AA = Lys, Phe, or Ala; PABC = p-NHC6H4CH<sub>2</sub>O<sub>2</sub>C; DOX = doxorubicin residue] are described.

IT 207613-88-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of branched peptide linkers)

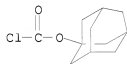
RN 207613-88-5 CAPLUS

CN Carbonochloridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester  
 (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 56 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1998:223939 CAPLUS  
 DOCUMENT NUMBER: 128:308483  
 TITLE: Diastereomeric separation of 1,5-benzodiazepines due to the presence of a chiral center on the N-5 alkyl chain  
 AUTHOR(S): Araldi, Gian Luca; Donati, Daniele; Tranquillini, Maria Elvira; Ursini, Antonella  
 CORPORATE SOURCE: Glaxo Wellcome S.p.A., Medicines Research Centre, Verona, 37135, Italy  
 SOURCE: Farmaco (1998), 53(1), 49-54  
 CODEN: FRMCE8; ISSN: 0014-827X  
 PUBLISHER: Elsevier Science S.A.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The presence of a chain bearing a stereogenic center at the N-5 position of 1-(1-adamantylmethyl)-3-aryleureido-2,4-dioxo-1,5-benzodiazepines induces optical resolution The synthesis of these compds. and their potency as potential CCK-B receptor antagonists is reported.  
 IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and resolution of cholecystokinin antagonist adamantylmethylbenzodiazepinediones)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

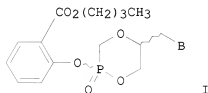


REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 57 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1998:118627 CAPLUS  
 DOCUMENT NUMBER: 128:167657  
 TITLE: Preparation of cyclic nucleotide phosphonate esters as virucides  
 INVENTOR(S): Arimilli, Murty N.; Jones, Robert J.; Prisbe, Ernest J.  
 PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA  
 SOURCE: U.S., 22 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 5717095	A	19980210	US 1996-774240	19961227
PRIORITY APPLN. INFO.:			US 1996-774240	19961227
OTHER SOURCE(S):	MARPAT 128:167657			
GI				

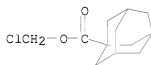


AB Cyclic nucleotide phosphonate esters I [B = (un)protected cytosin-1-yl] were prepared as virucides. Thus, I (B = cytosine) was prepared and tested for activity against HSV-1 and HSV-2 using MA 104 cells (EC50 = 2-200  $\mu$ M).

IT 71570-32-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of cyclic nucleotide phosphonate esters as virucides)

RN 71570-32-6 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid, chloromethyl ester (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 58 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:771564 CAPLUS

DOCUMENT NUMBER: 128:48480

TITLE: Synthesis and antinociceptive activity of [D-Ala2]Leu-enkephalin derivatives conjugated with the adamantane moiety

AUTHOR(S): Kitagawa, Kouki; Mizobuchi, Noriko; Hama, Teruo; Hibi, Tohru; Konishi, Ryoji; Futaki, Shiroh

CORPORATE SOURCE: Niigata College of Pharmacy, Niigata, 950-21, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1997), 45(11), 1782-1787  
CODEN: CPBTAL; ISSN: 0009-2363  
Pharmaceutical Society of Japan

PUBLISHER: Pharmaceutical Society of Japan

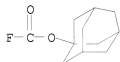
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Based on the physiochem. and pharmacol. properties of drugs having an adamantane skeleton, an adamantane-based moiety was evaluated as a drug carrier for poorly absorbed compds., including peptides, active towards the central nervous system (CNS). Seven [D-Ala2]Leu-enkephalin derivs. conjugated with an adamantane-based moiety at the C-terminus or N-terminus

were prepared by the solution-phase method and their biol. activities were examined. The compds. derivatized at the C-terminus through an ester or amide linkage were much more lipophilic than the parent peptide and exhibited moderate in vitro opioid activity (guinea-pig ileum assay). Among them, four derivs. H-Tyr-D-Ala-Gly-Phe-Leu-R [R = 1-adamantyloxy, 2-adamantyloxy, 2-(1-adamantyl)ethoxy, 1-adamantylamino] exhibited significant antinociceptive effects in an in vivo assay (mouse tail-pressure test) after s.c. administration. This result suggests that the introduction of the lipophilic adamantane moiety into [D-Ala2]Leu-enkephalin would improve the permeation of the poorly absorbed parent peptide through the blood-brain-barrier (BBB) without loss of antinociceptive effect.

IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and antinociceptive activity of adamantane-containing leucine-enkephalin derivs.)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 59 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:707582 CAPLUS

DOCUMENT NUMBER: 128:30034

TITLE: E-64 analogs as inhibitors of cathepsin B. On the role of the absolute configuration of the epoxysuccinyl group

AUTHOR(S): Schaschke, Norbert; Assfalg-Machleidt, Irmgard; Machleidt, Werner; Turk, Dushan; Moroder, Luis  
 CORPORATE SOURCE: Max-Planck-Institut für Biochemie, Martinsried, 82152, Germany

SOURCE: Bioorganic & Medicinal Chemistry (1997), 5(9), 1789-1797

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

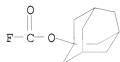
AB A series of trans-epoxysuccinyl-peptide derivs. based on the natural inhibitor E-64 were synthesized in the (2R,3R) and (2S,3S) configuration to analyze the role of the stereochem. of this residue in dictating inhibitory potency and selectivity for cysteine proteases. The authors confirmed that binding of E-64 like trans-epoxysuccinyl compds. is remarkably favored by the (2S,3S) configuration, but the authors also found that CA030-type compds. are stronger inhibitors in the (2R,3R) configuration than the related diastereomers. Consequently, the structural requirements for exploiting both the S and S' subsites are not additive and a structure-based design of bis-peptidyl derivs. of trans-epoxysuccinic acid to increase selective inhibition becomes even

more difficult. Addnl. contrasting effects were observed for the pH optima required in the electrostatic interactions at the S and S' subsites.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant; E-64 analogs as inhibitors of cathepsin B and role of absolute configuration of epoxysuccinyl group in relation to other cysteine proteases)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 60 OF 163 CAPLUS COPYRIGHT 2008 ACS on SIN

ACCESSION NUMBER: 1997:543458 CAPLUS

DOCUMENT NUMBER: 127:136036

TITLE: Preparation of nucleotide phosphonate ester analogs as virucides

INVENTOR(S): Arimilli, Murty N.; Bischofberger, Norbert W.; Jones, Robert J.; Lee, William A.; Prisbe, Ernest J.

PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA

SOURCE: PCT Int. Appl., 87 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

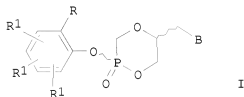
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9724361	A1	19970710	WO 1996-US20226	19961213
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5886179	A	19990323	US 1995-581147	19951229
AU 9714270	A	19970728	AU 1997-14270	19961213
EP 874858	A1	19981104	EP 1996-944469	19961213
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
NZ 325704	A	20000228	NZ 1996-325704	19961213
JP 2000503640	T	20000328	JP 1997-524416	19961213
BR 9612317	A	20001031	BR 1996-12317	19961213
PRIORITY APPLN. INFO.:			US 1995-581147	A2 19951229
			US 1995-9372P	P 19951229
			US 1995-9375P	P 19951229



US 1993-123483 A2 19930917  
 US 1994-193341 B2 19940208  
 WO 1996-US20226 W 19961213

OTHER SOURCE(S): MARPAT 127:136036  
 GI

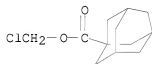


AB Nucleotide phosphonate esters I (R = H, alkyl, ether, CHO, CH<sub>2</sub>Bn, ester, keto, amide, sulfone; R<sub>1</sub> = H, CN, NO<sub>2</sub>, halo, alkyl, ether, ester, keto, SO<sub>3</sub>H, amine, CHO, OH; B = heterocycle, nucleobase) were prepared as virucides and immunogens. The analogs comprise an ester bond that is hydrolyzed in vivo to yield a corresponding phosphonate nucleotide analog. Thus, I (R = R<sub>1</sub> = H, B = adenine) was prepared and tested against HSV-1 and HSV-2. These compds. were tested against HSV-1 and HSV-2 (IC<sub>50</sub> = 2-200 μM) compared to 9-(2-Phosphonylmethoxyethyl)adenine (PMEA) (IC<sub>50</sub> = 138 μM). Some of these compds. were more active against HSV-2 than PMEA.

IT 71570-32-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of nucleotide phosphonate ester analogs as virucides)

RN 71570-32-6 CAPLUS

CN Tricyclo[3.3.1.1.3,7]decane-1-carboxylic acid, chloromethyl ester (CA INDEX NAME)



L4 ANSWER 61 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:503148 CAPLUS

DOCUMENT NUMBER: 127:121644

TITLE: Preparation of heteroarylacetic acid derivatives as leukotriene inhibitors

INVENTOR(S): Es-Sayed, Mazen; Yamamoto, Masaru; Frobels, Klaus; Poll, Chris; Grix, Suzanna; Tudhope, Stephen

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 46 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9722588	A1	19970626	WO 1996-EP5441	19961205
W: AU, BG, BR, BY, CA, CN, CZ, EE, HU, IL, IS, JP, KE, KP, KR, LT, LV, MX, MO, NZ, PL, RO, RU, SG, SI, SK, UA, US, VN				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9711909	A	19970714	AU 1997-11909	19961205
PRIORITY APPLN. INFO.:			GB 1995-25828	A 19951218
			WO 1996-EP5441	W 19961205

OTHER SOURCE(S): MARPAT 127:121644

AB The title compds. R1R2C(E)D [I; R1 = (un)substituted 6-membered aromatic heterocycle having up to 2 N atoms and to which a Ph ring can be fused; R2 = adamantyl, C3-6 cycloalkyl, pyridyl, etc.; D = H, Cl, OH; E = (NH)BCO2R5, (CO)cNR6R7, NHCOR8 (wherein b, c = 0-1; R5, R8 = adamantyl, menthyl, etc.; R6, R7 = H, C3-6 cycloalkyl, Ph, etc.)], inhibitors of the leukotriene synthesis particularly of leukotriene B4 and therefore useful for controlling and treating airway diseases and inflammatory processes, were prepared. Thus, reaction of 2-cyclopentyl-2-(2-pyridyl)acetic acid with PhCH2NH2 in the presence of ClCOOiBu and N-methylmorpholine in Me2CO afforded 59% I [R1 = 2-pyridyl; R2 = cyclopentyl; E = H; D = C(O)NHCH2Ph].

IT Compds. I are effective at 10-50 mg/kg (i.v.).

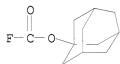
IT 62087-82-5, Adamantylloxycarbonyl fluoride

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of heteroarylacetic acid derivs. as leukotriene inhibitors)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 62 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:347198 CAPLUS

DOCUMENT NUMBER: 127:4949

TITLE: Synthetic and Mechanistic Studies on the Azabicyclo[7.3.1]enediylne Core and Naphtho[2,3-h]quinoline Portions of Dynemicin A

AUTHOR(S): Magnus, Philip; Eisenbeis, Shane A.; Fairhurst, Robin A.; Iliadis, Theodore; Magnus, Nicholas A.; Parry, David

CORPORATE SOURCE: Department of Chemistry and Biochemistry, University of Texas at Austin, Austin, TX, 78712, USA

SOURCE: Journal of the American Chemical Society (1997), 119(24), 5591-5605

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 127:4949

GI

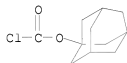
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The synthesis of the 13-keto-10-azabicyclo[7.3.1]enediynes core structure of dynemicin A has been achieved by two routes. The chemical of the 13-keto core structure is dominated by the unusually facile bridgehead enolization. Comparison of the rates of cycloaromatization of a variety of enediynes revealed that substantial rate differences occurred even though the distance between the bonding acetylenes was virtually identical. A nonradical cycloaromatization pathway, initiated by thiol addition to the enediyne system, was discovered, and the simple core amine I exhibits modest in vitro and in vivo antitumor activity. Finally, two methods for the synthesis of the naphtho[2,3-h]quinoline portion of dynemicin A are described, and both these compds., II [R = COCMe<sub>3</sub>, Et], also exhibit antitumor activity.

IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and antitumor activity of the azabicyclohexadecatetraenediynes and naphthoquinoline fragments of dynemicin A)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



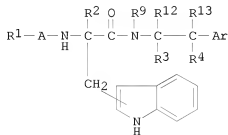
REFERENCE COUNT: 144 THERE ARE 144 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L4 ANSWER 63 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1997:342745 CAPLUS  
 DOCUMENT NUMBER: 127:51005  
 TITLE: Preparation of N-substituted cycloalkyl and polycycloalkyl  $\alpha$ -substituted Trp-Phe- and phenethylamine derivatives as anxiolytics and cholecystokinin activity-modifying agents  
 INVENTOR(S): Horwell, David C.; Pritchard, Martyn C.; Roberts, Edward; Richardson, Reginald S.; Aranda, Julian  
 PATENT ASSIGNEE(S): Warner-Lambert Company, USA  
 SOURCE: U.S., 108 pp., Cont.-in-part of U.S. Ser. No. 958,196, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

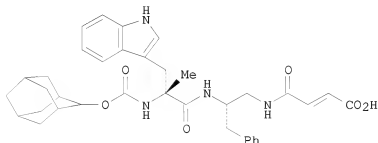
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 5631281	A	19970520	US 1994-235814	19940428
AU 9059628	A	19910117	AU 1990-59628	19900628

AU 644088	B2	19931202		
ZA 9005057	A	19920226	ZA 1990-5057	19900628
EP 479910	A1	19920415	EP 1990-911185	19900628
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
JP 04506079	T	19921022	JP 1990-510126	19900628
JP 2972331	B2	19991108		
CA 2060652	C	20010821	CA 1990-2060652	19900628
CA 2344707	C	20020730	CA 1990-2344707	19900628
US 5278316	A	19940111	US 1990-629809	19901219
FI 106197	B1	20001215	FI 1991-6060	19911220
NO 9105122	A	19920227	NO 1991-5122	19911227
NO 301831	B1	19971215		
US 5580896	A	19961203	US 1995-447142	19950522
US 5622983	A	19970422	US 1995-447141	19950522
PRIORITY APPLN. INFO.:			US 1989-374327	B2 19890629
			US 1989-422486	B2 19891016
			US 1990-580811	B2 19900605
			US 1990-545222	B2 19900628
			US 1990-629809	A3 19901219
			US 1992-958196	B2 19921007
			US 1990-530811	A 19900605
			NZ 1990-234264	A 19900627
			CA 1990-2060652	A3 19900628
			WO 1990-US3553	A 19900628
			US 1994-235814	B3 19940428

OTHER SOURCE(S): MARPAT 127:51005  
GI



I

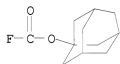


II

AB Novel unnatural dipeptoids I [R1 = C3-12 (poly)cycloalkyl containing 0-4 substituents each (un)branched C1-6 alkyl, halo, CN, OR, SR, CO2R, CF3, NR5R6, (CH2)nOR5; R = (un)branched C1-6 alkyl, R5, R6 = H, C1-6 alkyl, n = 0-6; A = (CH2)nCO, SO2, S(O), NHCO, (CH2)nO2C, SCO, O(CH2)nCO, CH:CHCO; R2 = (un)branched C1-6 alkyl, CH:CH2, C.tplbond.CH, CH2CH:CH2,

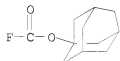
CH2C.tplbond.CH, (CH2)nAr, (CH2)nOR, (CH2)nOAr, (CH2)nCO2R, (CH2)nNR5R6; R3, R4 = independently H, R2, (CH2)q-B-D; q = 0-3; B = bond, O2C(CH2)n, O(CH2)n, SO2NH(CH2)n, NHCO(CH2)n, CONH(CH2)n, NHCOC(H)CH, CO2(CH2)n, CO(CH2)n, S(CH2)n, S(O)(CH2)n, SO2(CH2)n, CONHCR7:CR8, NHCOCR7:CR8, CONHCHR7CHR8, NHCOCR7CHR8, CR7:CR8, CHR7CHR8; R7, R8 = independently H, R2; R7R8 = (CH2)m, m = 1-5; D = CO2R, CH2OR, CHR2OR, CH2SR, CHR2SR, CONR5R6, CN, NR5R6, OH, PhSO2NHCO, CF3CONHCO, CF3SO2NHCO, H2NSO2, H, acid replacement group such as tetrazole; R9 = H, (un)branched C1-6 alkyl, (CH2)nCO2R, (CH2)nOAr, (CH2)nAr, (CH2)nNR5R6; R10 = OH, NH2, Me, Cl; R11 = CN, CO2H, CF3; Ar = 2- or 3-thienyl, 2- or 3-furanyl, 2-, 3- or 4-pyridinyl, (un)substituted Ph containing H, halo, Me, OMe, CF3, NO2, OH, NH2, OCF3, NHCOC(H)CH2CO2H, or CH2CH2CO2H groups; R12, R13 = H, or taken with R3 and R4 form a double bond] are disclosed. I are  $\alpha$ -substituted Trp-Phe derivs. useful as agents in the treatment of obesity, hypersecretion of gastric acid in the gut, gastrin-dependent tumors, colorectal tumors, or as antipsychotics. Further, compds. I are anti-anxiety agents, anti-ulcer agents, antidepressant agents, and are agents useful for preventing the withdrawal response produced by chronic treatment or use followed by chronic treatment followed by withdrawal from nicotine, diazepam, alc., cocaine, caffeine, or opioids. Also disclosed are pharmaceutical compns. and methods of treatment using the dipeptides as well as processes for preparing them and novel intermediates useful in their preparation. An addnl. feature of the invention is the use of the subject compds. to prepare pharmaceutical and diagnostic compns. Thus, methyltryptophan derivative II, prepared from tert-butoxycarbonyl-L-phenylalaninol, 2-adamantylloxycarbonyl- $\alpha$ -methyl-D-tryptophan, and monomethyl fumarate, displayed  $K_i = 0.00008 \mu\text{M}$  in a central cholecystokinin binding assay.

IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of [(poly)cycloalkoxycarbonyl]methyltryptophan derivs. as anxiolytics and cholecystokinin activity-modifying agents)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 64 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1997:121360 CAPLUS  
 DOCUMENT NUMBER: 126:131662  
 TITLE: Preparation of diterpene and benzolactam phorboids as protein kinase C modulators  
 INVENTOR(S): Driedger, Paul E.; Quick, James  
 PATENT ASSIGNEE(S): Procyon Pharmaceuticals, Inc., USA  
 SOURCE: PCT Int. Appl., 82 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 13  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9640614	A1	19961219	WO 1996-US9710	19960607
W: JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5891870	A	19990406	US 1995-472871	19950607
US 5955501	A	19990921	US 1995-480191	19950607
US 6080784	A	20000627	US 1995-480251	19950607
JP 08268961	A	19961015	JP 1996-69274	19960228
PRIORITY APPLN. INFO.:			US 1995-472871	A 19950607
			US 1995-472890	A 19950607
			US 1995-480191	A 19950607
			US 1995-480251	A 19950607
			US 1986-872812	B2 19860611
			JP 1987-503773	19870610
			US 1987-61299	YY 19870610
			US 1989-322851	B2 19890313
			US 1989-322881	B3 19890313
			US 1990-537885	B2 19900614
			US 1990-559296	B2 19900730
			US 1990-559701	A2 19900730
			US 1991-664396	A2 19910304
			US 1991-664397	B2 19910304
			US 1993-120643	A2 19930913
AB	The diterpene and benzolactam phorboids I-D ( I represents a radical derived from a phorbol- or daphnane-type diterpenoid compound, which compound binds reversibly or irreversibly to a diacylglycerol-type receptor and/or activates any form of protein kinase C, and contains a hydroxylmethyl or 1-hydroxyethyl group bonded to C-6, and contains at least one substituent other than H or HO at C-12 and D is a polar group attacher to carbon 13) and I-D may not be 12-O-methylphorbol, 12-O-ethylphorbol or compds. of the exact phorbol; structure with acyl groups at the 12-hydroxy group. Thus, 20-O-[diphenyl(4-methoxyphenyl)methyl]-13-O-(isopropylidimethylsilyl)phorbol was treated with 4-(9,10-dihydrophenanthren-2-yl)butyric anhydride followed by desilylation to give phorbol 12-[4-(9,10-dihydrophenanthren-2-yl)butyrate (II). The compds. were tested for antiinflammatory, anti-HIV, and anticancer activity. Thus, II had a ID50 of 12 µM against human RPMI-7272 melanoma cells.			
IT	62087-82-5, Adamantyl fluoroformate			
	RL: RCT (Reactant); RACT (Reactant or reagent)			
	(preparation of diterpene and benzolactam phorboids as protein kinase C modulators)			
RN	62087-82-5 CAPLUS			
CN	Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)			

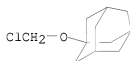


DOCUMENT NUMBER: 126:8576  
 TITLE: Amino acids and peptides. Part 45. Development of a new  $N\pi$ -protecting group of histidine,  $N\pi$ -(1-adamantyloxymethyl)histidine, and its evaluation for peptide synthesis  
 AUTHOR(S): Okada, Yoshio; Wang, Jidong; Yamamoto, Takeshi; Mu, Yu; Yokoi, Toshio  
 CORPORATE SOURCE: Fac. Pharmaceutical Sci., Kobe Gakuin Univ., Kobe, 651-21, Japan  
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1996), (17), 2139-2143  
 CODEN: JCPRB4; ISSN: 0300-922X  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 126:8576

AB  $N\pi$ -(1-Adamantyloxymethyl)histidine, His( $N\pi$ -1-Adom), is prepared and its properties are examined. The 1-Adom group can be easily removed by trifluoroacetic acid and it is stable to 20% piperidine-DMF and 1 mol dm<sup>-3</sup> NaOH. His( $N\pi$ -1-Adom) derivs. can suppress racemization during coupling reactions. His( $N\pi$ -1-Adom) can be used in solid-phase peptide synthesis in combination with fluorenyl-methoxycarbonyl (Fmoc) as an  $N\alpha$ -protecting group. TSH-releasing hormone is successfully synthesized by using His( $N\pi$ -1-Adom).

IT 177093-80-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (development and use of the adamantyloxymethyl protective group for solid-phase preparation of histidine-containing peptides)

RN 177093-80-0 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-(chloromethoxy)- (CA INDEX NAME)

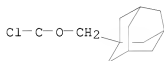


L4 ANSWER 66 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:569675 CAPLUS  
 DOCUMENT NUMBER: 125:300266  
 TITLE: Absolute Kinetics of Alkoxychlorocarbene Fragmentation  
 AUTHOR(S): Moss, Robert A.; Ge, Chuan-Sheng; Maksimovic, Ljiljana  
 CORPORATE SOURCE: Department of Chemistry, Rutgers The State University of New Jersey, New Brunswick, NJ, 08903, USA  
 SOURCE: Journal of the American Chemical Society (1996), 118(40), 9792-9793  
 CODEN: JACSAT; ISSN: 0002-7863  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

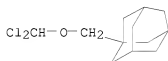
AB Alkoxychlorocarbenes, ROCCl, generated by the photolysis of 3-alkoxy-3-halodiazirines in MeCN, fragmented to ion pairs [R<sup>+</sup> OC Cl<sup>-</sup>] from which products were derived. Competitively, the carbenes were

intercepted by HCl or traces of water. The absolute rate consts. derived for carbene fragmentation in MeCN-pyridine (where HCl was scavenged), were determined by laser flash photolysis: R = benzyl,  $k = 0.69-1.3 \times 10^6 \text{ s}^{-1}$ ; R = (1-adamantyl)methyl,  $k = 2.8-5.2 \times 10^6 \text{ s}^{-1}$ ; and R = neopentyl,  $k = 0.3-1.3 \times 10^6 \text{ s}^{-1}$ . (The ranges shown for  $k$  represent detns. by direct or double reciprocal kinetic analyses.). Principal products (in MeCN), as a function of R, included R = benzyl; benzyl chloride (63%) and N-benzyl acetamide (37%, Ritter reaction); R = (1-adamantyl)methyl; 1-homoadamantyl chloride (61.8%), (1-adamantyl)methyl chloride (2.7%), N-1-homoadamantyl acetamide (11.3%), 1-homoadamantanol (5.5%), (1-adamantyl)methyl dichloromethyl ether (16.3%), and (1-adamantyl)methyl formate (2.4%); R = neopentyl; 2-methyl-2-butene (13.8%), 2-methyl-1-butene (26.5%), 2-chloro-2-methylbutane (4.0%), neopentyl dichloromethyl ether (51.6%), and neopentyl formate (3.4%). The mechanistic origins of the products are discussed. In particular, distinction is made between the ion pair (carbene fragmentation) products and the HCl (dichloromethyl ethers) and water (formates) carbene interception products. A strong solvent effect was noted; in hexane, the carbenes were slow to fragment and carbene dimerization became the chief reaction pathway.

IT 182802-27-3  
 RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent)  
 (absolute kinetics of alkoxychlorocarbene fragmentation)  
 RN 182802-27-3 CAPLUS  
 CN Methylene, chloro(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethoxy)- (9CI) (CA INDEX NAME)



IT 182802-46-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (absolute kinetics of alkoxychlorocarbene fragmentation)  
 RN 182802-46-6 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(dichloromethoxy)methyl]- (CA INDEX NAME)



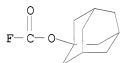
L4 ANSWER 67 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:467267 CAPLUS  
 DOCUMENT NUMBER: 125:196383  
 TITLE: Preparation of peptidealdehyde analogs as trypsin inhibitors for treatment of pancreatitis.  
 INVENTOR(S): Brunck, Terence K.; Pepe, Michael G.; Pearson, Daniel A.; Webb, Thomas R.



PATENT ASSIGNEE(S): Corvas International, Inc., USA  
 SOURCE: U.S., 22 pp., Cont.-in-part of U.S. Ser. No. 828,388,  
 abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5534498	A	19960709	US 1993-11666	19930129
WO 9314779	A1	19930805	WO 1993-US906	19930129
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 627925	A1	19941214	EP 1993-905778	19930129
EP 627925	B1	20040929		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 277943	T	20041015	AT 1993-905778	19930129
CA 2128711	C	20050111	CA 1993-2128711	19930129
US 5714580	A	19980203	US 1995-455974	19950531
PRIORITY APPLN. INFO.:			US 1992-828388	B2 19920130
			US 1993-11666	A 19930129
			WO 1993-US906	W 19930129

OTHER SOURCE(S): MARPAT 125:196383  
 AB R-A1-A2-A3 (R = hydrophobic group; A1 = Glu, Asp, and equivalent; A2 = Pro and equivalent; A3 = argininealdehyde and equivalent), were prepared Thus, BOC-Asp-Pro-Arg-al, prepared by solid phase synthesis on a semicarbazide support, inhibited trypsin with  $K_i = 0.00045 \mu\text{M}$ , and reduced amylase activity in mice injected with caerulein.  
 IT 62087-82-5, Adamantylloxycarbonyl fluoride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of peptidealdehyde analogs as trypsin inhibitors for treatment of pancreatitis)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 68 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:356075 CAPLUS  
 DOCUMENT NUMBER: 125:141870  
 TITLE: Effect of pressure on the rate of solvolysis. II. Reactions of methyl and phenyl chloroformates and 1-adamantyl derivatives  
 AUTHOR(S): Kwun, Oh Cheun; Kim, Jeong Rim; Kyong, Jin Burm; Lee, Young Hoon; Kim, Jong Chul  
 CORPORATE SOURCE: Dep. Chem., Hanyang Univ., Ansan, 425-791, S. Korea  
 SOURCE: Journal of the Korean Chemical Society (1996), 40(5), 327-332

CODEN: JKCSEZ; ISSN: 1017-2548

PUBLISHER: Korean Chemical Society

DOCUMENT TYPE: Journal

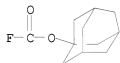
LANGUAGE: Korean

AB The rates of solvolysis of Me chloroformate, Ph chloroformate and 1-adamantyl derivs. in binary solvent mixts. have been measured by a conductometric method at various temps. and pressures. The activation parameters were estimated from the rate consts. The activation volume and the activation entropy are both neg., but the activation enthalpy is pos. This behavior is discussed in terms of electrostriction of solvation. Reactivities were also estimated from the correlation of the activation vols. with the activation entropies. From these results, it could be estimated that the solvolyses of 1-adamantyl fluoroformate (in aqueous TFE) and 1-adamantyl tosylate are unimol. reactions, while the solvolyses of Me chloroformate, Ph chloroformate and 1-adamantyl fluoroformate (in aqueous alc.) proceed via a bimol. mechanism.

IT 62087-82-5, 1-Adamantyl fluoroformate

RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
(pressure effect on solvolysis kinetics of)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

L4 ANSWER 69 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:243788 CAPLUS

DOCUMENT NUMBER: 125:11440

TITLE: Development of a new N $\pi$ -protecting group for

histidine, N $\pi$ -1-adamantyloxymethylhistidine  
Okada, Yoshio; Wang, Jidong; Yamamoto, Takeshi; Mu, Yu  
Fac. Pharmaceutical Sci., Kobe Gakuin Univ., Kobe,  
651-21, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1996), 44(4),  
871-3

CODEN: CPBTAL; ISSN: 0009-2363

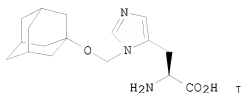
PUBLISHER: Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:11440

GI

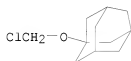


AB N $\pi$ -1-Adamantyloxymethylhistidine (I) was prepared, and the properties of the 1-adamantyloxymethyl (1-Adom) group were examined. 1-Adom group can be easily removed by TFA; it is stable to 20% piperidine/DMF and 1N NaOH. Derivs. of I can suppress racemization during coupling reaction. TRH was successfully synthesized using I.

IT 177093-80-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation, peptide coupling, and deprotection reactions of (adamantyloxymethyl)histidine derivs.)

RN 177093-80-0 CAPLUS

CN Tricyclo[3.3.1.1.3]decane, 1-(chloromethoxy)- (CA INDEX NAME)



L4 ANSWER 70 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:112937 CAPLUS

DOCUMENT NUMBER: 124:232806

TITLE: Synthesis of esters of dihydroartemisinin and 11 $\alpha$ -hydroxy-12 $\alpha$ -dihydroartemisinin

AUTHOR(S): Li, Ying; Zhang, Huibin; Ye, Yunpeng

CORPORATE SOURCE: Shanghai Inst. Materia Med., Academia Sinica, Shanghai, 200031, Peop. Rep. China

SOURCE: Zhongguo Yaowu Huaxue Zazhi (1995), 5(2), 127-30  
 CODEN: ZYHZEJ; ISSN: 1005-0108

PUBLISHER: Zhongguo Yaowu Huaxue Zazhi Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

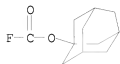
AB In order to search for new derivs. of artemisinin with more stability and higher antimalarial activity, 7 esters of 12 $\alpha$ -dihydroartemisinin and 11 $\alpha$ -hydroxy-12 $\alpha$ -dihydroartemisinin were synthesized and tested in mice against chloroquine-resistant Plasmodium berghei. On the basis of the observation of their stability, the bulky substituent groups were considered to be favorable to stability of these compds. While derivs. of 12 $\alpha$ -dihydroartemisinin were as active as artemisinin, the derivs. of 11-hydroxy-12 $\alpha$ -dihydroartemisinin were considerably less active than artemisinin. This demonstrated that introduction of a hydroxy group into 11-position resulted in reduction of antimalarial activity.

IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (synthesis of antimalarial esters of 12 $\alpha$ -dihydroartemisinin and

11 $\alpha$ -hydroxy-12 $\alpha$ -hydroartemisinin)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 71 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:55475 CAPLUS

DOCUMENT NUMBER: 124:232942

TITLE: Oxidative azidonation of glycals using the reagent combination PhIO/TMSN<sub>3</sub>: synthesis of diaminopyrans

AUTHOR(S): Magnus, Philip; Roe, Michael B.

CORPORATE SOURCE: Dep. Chemistry Biochemistry, Univ. Texas Austin, Austin, TX, 78712, USA

SOURCE: Tetrahedron Letters (1996), 37(3), 303-06

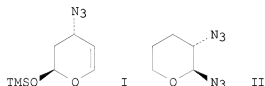
CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Dihydropyrans react with (PhIO)<sub>n</sub>/TMSN<sub>3</sub> to give 3-azido adducts, e.g. I, and with (PhIO)<sub>n</sub>/TMSN<sub>3</sub>/TEMPO(cat) to give 2,3-bis-azido adducts, e.g. II, which can be further elaborated into amino pyrans.

IT 5854-52-4

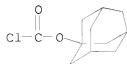
RL: RCT (Reactant); RACT (Reactant or reagent)

(oxidative azidolysis of glycals using the reagent combination

PhIO-TMSN<sub>3</sub>lin synthesis of diaminopyrans)

RN 5854-52-4 CAPLUS

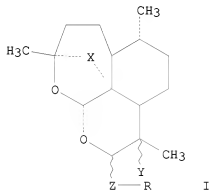
CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 72 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:846677 CAPLUS  
 DOCUMENT NUMBER: 123:257084  
 TITLE: Preparation of arteannuin derivatives as drugs  
 INVENTOR(S): Li, Ying; Jiang, Hongjian; Pan, Jianping  
 PATENT ASSIGNEE(S): Shanghai Medicines Institute Chinese Academy of Sciences, Peop. Rep. China  
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 48 pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1087638	A	19940608	CN 1993-112454	19930611
CN 1038416	B	19980520		
PRIORITY APPLN. INFO.:			CN 1992-113801	A 19921204
OTHER SOURCE(S):		MARPAT 123:257084		

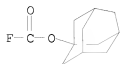
GI



AB The title compds. [I; X = -O-O-, -O-; Y = H, OH; Z = -O-, -OCO-; R = alkaline or non-alkaline substituent], useful as parasiticides, antitumors, and immunoregulators and for the treatment of Alzheimer's disease, (no data), are prepared from dihydroarteannuin via etherification, esterification, oxidation, aminolysis, hydrolysis and Mannich reaction. Thus, dehydrodihydroarteannuin in acetone containing N-methylmorpholine N-oxide was treated with osmium tetroxide at room temperature for 24 h to give 94% a mixture of epimers I [X = -O-O-, Y =  $\alpha$ -OH, ZR =  $\alpha$ -,  $\beta$ -OH]. Water soluble salts from aminoarteannuin and organic or inorg. acids can form products which are acceptable to human bodies and have multibiol. activities.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of arteannuin derivs. as drugs)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

L4 ANSWER 73 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:835487 CAPLUS  
 DOCUMENT NUMBER: 123:257269  
 TITLE: Preparation of viricidal nucleotide analogs  
 INVENTOR(S): Bischofberger, Norbert W.; Jones, Robert J.; Arimilli, Murty N.; Lin, Kuei-Ying; Louie, Michael S.; McGee, Lawrence R.; Prisbe, Ernest J.; Lee, William A.; Cundy, Kenneth C.  
 PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA  
 SOURCE: PCT Int. Appl., 154 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9507920	A1	19950323	WO 1994-US10539	19940916
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5656745	A	19970812	US 1993-123483	19930917
CA 2171743	A1	19950323	CA 1994-2171743	19940916
CA 2171743	C	20071120		
AU 9478752	A	19950403	AU 1994-78752	19940916
AU 691527	B2	19980521		
EP 719273	A1	19960703	EP 1994-929832	19940916
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
BR 9407510	A	19970107	BR 1994-7510	19940916
JP 09506334	T	19970624	JP 1994-509394	19940916
US 5798340	A	19980825	US 1996-617849	19960506
US 6225460	B1	20010501	US 1999-247497	19990210
US 2001041794	A1	20011115	US 2001-801164	20010307
US 2004242465	A1	20041202	US 2004-882022	20040629
JP 2006182779	A	20060713	JP 2005-361122	20051214
JP 2006290898	A	20061026	JP 2006-159159	20060607
JP 2006306882	A	20061109	JP 2006-159160	20060607
PRIORITY APPLN. INFO.:			US 1993-123483	A 19930917
			US 1994-193341	A 19940208
			JP 1995-509394	A3 19940916
			WO 1994-US10539	W 19940916
			US 1996-597005	A2 19960205
			US 1996-617849	A3 19960506

US 1998-71420	B1 19980501
US 1999-247497	A1 19990210
US 2001-801164	B1 20010307
US 2004-778856	B1 20040213

OTHER SOURCE(S): MARPAT 123;257269

GI For diagram(s), see printed CA Issue.

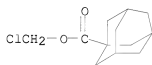
AB Nucleotide analogs [I; B = heterocyclic base; L1, L2 = amino acid or polypeptide residue; Z = (un)substituted 5-membered-ring-containing (un)substituted hydrocarbaryl residue; the dotted lines represent facultative bonds], useful as antiviral agents, antitumor agents (no data), and antineoplastic agents (no data), which are further characterized by the presence of an amide-linked amino acid or an ester-linked group which is bonded to the P atom of phosphonate nucleotide analogs, are prepared and their viricidal activity against HSV-1 and HSV-2 (strain 413-92) viruses presented. I comprise a phosphoramidate or ester bond that is hydrolyzed in vivo to yield a corresponding phosphonate nucleotide analog and methods and intermediates for I synthesis and use are also described.

IT 71570-32-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of viricidal nucleotide analogs from)

RN 71570-32-6 CAPLUS

CN Tricyclo[3.3.1.1.3,7]decane-1-carboxylic acid, chloromethyl ester (CA INDEX NAME)



L4 ANSWER 74 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:812991 CAPLUS

DOCUMENT NUMBER: 123:228919

TITLE: Preparation of substituted di- and tripeptide inhibitors of protein:farnesyl transferase

INVENTOR(S): Bolton, Gary Louis; Creswell, Mark Wallace; Hodges, John Cooke; Wilson, Michael William

PATENT ASSIGNEE(S): Warner Lambert Co., USA

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

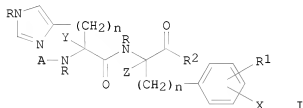
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9512612	A1	19950511	WO 1994-US11553	19941012
W: AM, AU, BG, BY, CA, CZ, EE, FI, GE, HU, JP, KG, KR, NO, NZ, PL, RO, RU, SI, UA				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2170766	A1	19950511	CA 1994-2170766	19941012

AU 9479760	A	19950523	AU 1994-79760	19941012
AU 681454	B2	19970828		
EP 730605	A1	19960911	EP 1994-930725	19941012
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09504547	T	19970506	JP 1995-513224	19941012
JP 3597863	B2	20041208		
HU 75308	A2	19970528	HU 1996-1193	19941012
FI 9601819	A	19960429	FI 1996-1819	19960429
NO 9601814	A	19960506	NO 1996-1814	19960503
US 5830868	A	19981103	US 1996-671460	19960627
PRIORITY APPLN. INFO.:			US 1993-148735	A 19931105
			US 1994-303301	A 19940913
			WO 1994-US11553	W 19941012

OTHER SOURCE(S): MARPAT 123:228919

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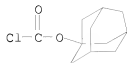
AB Novel protein:farnesyl transferase enzyme inhibitors I [n = 1, 2; A = COR3, CO2R3, CONHR3, CSR3, C(S)OR3, CSNHR3, CF3SO2, aryl-SO2, alkyl-SO2; R3 = alkyl, (CH2)m-cycloalkyl, (CH2)m-aryl, (CH2)m-heteroaryl, (CH2)mO-alkyl; m = 0-3; R, Y, Z = independently H, Me; R1 = H, CO-aryl, (CH2)m-aryl, O(CH2)m-cycloalkyl, O(CH2)m-aryl, O(CH2)m-heteroaryl, (CH2)mO-alkyl, located at the meta or para position; X = 1-4 substituents H, alkyl, CF3, F, Cl, Br, iodo, HO, MeO, NO2, NH2, NMe2, OPO3H2, CH2PO3H2; R2 = NR(CH2)nCO2R3, NR(CH2)nCONHR3, NR(CH2)nR3, NR(CH2)nCH2OR4, NR(CH2)nCH2SR4, NRCH(COR5)(CH2)n-heteroaryl, NRCH(COR5)(CH2)nOR3, NRCH(COR5)(CH2)nSR3, etc.; R4 = H, R3; R5 = OH, NH2, OR3, NHR3], optical isomers, diastereomers, or pharmaceutically acceptable salts thereof are claimed and described, as well as methods for preparation and pharmaceutical compns., which are useful in controlling tissue proliferative diseases, including cancer and restenosis. Thus, PhCH2O2C-D-His-L-Tyr(CH2Ph)-L-Ser(CH2Ph)-NHET, prepared via standard solution peptide coupling reactions, inhibited protein:farnesyl transferase with IC50 = 0.028  $\mu$ M.

IT 5854-52-4, 1-Adamantyl chloroformate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of substituted di- and tripeptide inhibitors of protein:farnesyl transferase)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

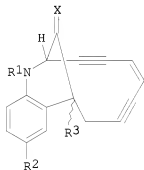




L4 ANSWER 75 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:795441 CAPLUS  
 DOCUMENT NUMBER: 123:313637  
 TITLE: Synthesis of tetrahydroquinoline enediyne core analogs of dynemicin  
 INVENTOR(S): Magnus, Philip D.; Iliadis, Theodore; Eisenbeis, Shane A.; Fairhurst, Robin A.  
 PATENT ASSIGNEE(S): University of Texas System, USA  
 SOURCE: U.S., 25 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5442065	A	19950815	US 1993-118862	19930909
PRIORITY APPLN. INFO.:			US 1993-118862	19930909
OTHER SOURCE(S):			CASREACT 123:313637; MARPAT 123:313637	

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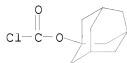
AB A process is described for the preparation of the core azabicyclo[7.3.1]tridecenediyne moiety I [X = CH:CH, CH<sub>2</sub>, O; R<sub>1</sub> = H, 1-adamantylloxycarbonyl, CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Cl, CO<sub>2</sub>Me; R<sub>2</sub> = H, OMe; R<sub>3</sub> = SePh, CH<sub>2</sub>COMe, OH, OBz, SPh, CHPhOH, H, CH<sub>2</sub>OMe] of the antitumor antibiotic dynemicin. The synthesis allows efficient production of the enediyne as a stable, compound in good yield from the adamantyl N-protected azabicyclo[7.3.1]tridecadiyne. 3-Hydroxy-6-methoxyquinoline was also prepared I [X = O, R<sub>1</sub>, R<sub>3</sub> = H, R<sub>2</sub> = H, OMe] gave T/C ratios of 170 and 175%, resp. at 2 mg/kg in a P388 leukemia assay.

IT 5854-52-4, 1-Adamantyl chloroformate

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of azabicyclotridecenediyne analogs of dynemicin from  
quinolinols)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 76 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:551204 CAPLUS

DOCUMENT NUMBER: 122:282216

TITLE: Method for dosing antiviral hydroxy-substituted  
nucleotide therapeutic compounds using the internally  
cyclized analogs, and preparation of the cyclized  
analog

INVENTOR(S): Alexander, Petr; Arimilli, Murty N.; Bischofberger,  
Norbert W.; Hitchcock, Michael J. M.

PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

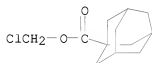
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9507919	A1	19950323	WO 1994-US10467	19940916
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
RM: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5656745	A	19970812	US 1993-123483	19930917
CA 2171868	A1	19950323	CA 1994-2171868	19940916
AU 9479565	A	19950403	AU 1994-79565	19940916
AU 690587	B2	19980430		
EP 719274	A1	19960703	EP 1994-930441	19940916
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09506333	T	19970624	JP 1994-509369	19940916
JP 2006182779	A	20060713	JP 2005-361122	20051214
JP 2006290898	A	20061026	JP 2006-159159	20060607
JP 2006306882	A	20061109	JP 2006-159160	20060607
PRIORITY APPLN. INFO.:			US 1993-123483	A 19930917
			US 1994-193341	A 19940208
			JP 1995-509394	A3 19940916
			WO 1994-US10467	W 19940916

OTHER SOURCE(S): CASREACT 122:282216; MARPAT 122:282216

AB The internally cyclized congeners of hydroxy-substituted nucleotide  
analog have been found to exhibit substantially lower toxicity in vivo

than their uncyclized analogs, while retaining essentially the same antiviral activity. This was unexpected because the prior art would have suggested that the cyclic analogs offered no significant advantages in respect to toxicity in vivo. This finding permits the administration of much greater doses of the cyclic congeners than otherwise would have been possible and/or allows the clinician to omit toxicity-ameliorating interventions. The cyclized analogs are disclosed, as are methods for their preparation. Thus, cidofovir (HPMPC) was reacted with N,N'-dicyclohexyl-4-morpholinecarboxamidine to form the corresponding cyclized HPMPC (cHPMPC). In a five day repeat dose toxicity study determining the nephrotoxicity of HPMPC and cHPMPC in rats, histopathol. evaluation of animals treated with HPMPC (100 mg/kg) showed degenerative changes in the kidneys, while in animals treated with cHPMPC (100 and 250 mg/kg), no treatment-related changes in the kidney were seen.

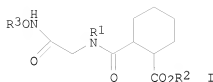
IT 71570-32-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (antiviral cyclic analogs of hydroxy-substituted nucleotide therapeutic compds. with reduced cytotoxicity, and preparation of cyclized analogs)  
 RN 71570-32-6 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid, chloromethyl ester (CA INDEX NAME)



L4 ANSWER 77 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:520382 CAPLUS  
 DOCUMENT NUMBER: 122:264953  
 TITLE: Preparation of 2-[[[(2-(hydroxyamino)-2-oxoethyl] amino]carbonyl]cyclohexanecarboxylates as angiotensin converting enzyme inhibitors.  
 INVENTOR(S): Turbanti, Luigi; Giorgi, Raffaello; Bonaccorsi, Fabrizio; Bugno, Cristiana Di; Subissi, Alessandro; Criscuoli, Marco; Carganico, Germano  
 PATENT ASSIGNEE(S): Laboratorio Guidotti e C. SpA, Italy  
 SOURCE: Ger. Offen., 30 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4421515	A1	19941222	DE 1994-4421515	19940620
FR 2706897	A1	19941230	FR 1994-7523	19940620
FR 2706897	B1	19960126		
GB 2279345	A	19950104	GB 1994-12367	19940620
PRIORITY APPLN. INFO.:			IT 1993-MI1329	A 19930621
OTHER SOURCE(S):	MARPAT	122:264953		

GI

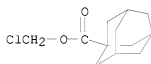


AB Title compds. [I; R1 = alkyl; R2 = H, alkyl, cycloalkyl, Ph, alkoxyethyl, 2-tetrahydrofurylmethyl, 2-(dialkylamino)ethyl, N-methylbenzamidylmethyl, etc.; R3 = H, alkoxyethyl, benzyloxyethyl, alkylcarabonyl, adamantylcarbonyl, (substituted) PhCO], were prepared. Thus, cis-(1S,2R)-I (R1 = Me; R2 = CH2OCO2Et; R3 = H) inhibited angiotensin I-induced increase in blood pressure in rats with ED50 = 0.10  $\mu$ mol/kg i.v.

IT 71570-32-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of 2-[[[(2-(hydroxyamino)-2-oxoethyl] amino]carbonyl]cyclohexanecarboxylates as ACE inhibitors)

RN 71570-32-6 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid, chloromethyl ester (CA INDEX NAME)



L4 ANSWER 78 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:408402 CAPLUS

DOCUMENT NUMBER: 122:188167

TITLE: Preparation of difluoropentapeptide derivatives as antiinflammatory and analgesic agents.

INVENTOR(S): McIver, John McMillan

PATENT ASSIGNEE(S): Procter and Gamble Co., USA

SOURCE: PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

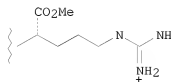
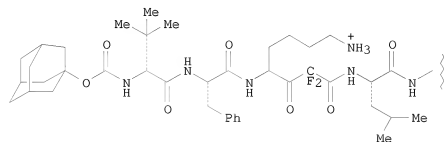
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9414842	A1	19940707	WO 1993-US12349	19931216
W: AU, BB, BG, BR, BY, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2152267	A1	19940707	CA 1993-2152267	19931216
CA 2152267	C	20010417		

AU 9458039	A	19940719	AU 1994-58039	19931216
AU 697299	B2	19981001		
EP 675901	A1	19951011	EP 1994-903677	19931216
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
HU 72977	A2	19960628	HU 1995-1844	19931216
BR 9307728	A	19990831	BR 1993-7728	19931216
RU 2141971	C1	19991127	RU 1995-113497	19931216
CZ 286126	B6	20000112	CZ 1995-1645	19931216
PL 177914	B1	20000131	PL 1993-309638	19931216
CN 1095072	A	19941116	CN 1993-119938	19931222
CN 1056615	B	20000920		
IN 181696	A1	19980905	IN 1993-DE1439	19931222
TW 402607	B	20000821	TW 1994-83100422	19940119
US 5760002	A	19980602	US 1994-318179	19941005
FI 9503106	A	19950713	FI 1995-3106	19950621
NO 9502485	A	19950822	NO 1995-2485	19950621

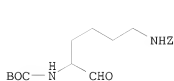
PRIORITY APPLN. INFO.:

OTHER SOURCE(S):  
GI

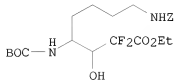
MARPAT 122:188167

A 19921222  
W 19931216

I



II



III

AB X(CH<sub>2</sub>)<sub>n</sub>VZCHR1COCHR2CONHCHR3COCF2CONHCHR4CONHCHR5CO2Y [X = C4-15 cycloalkyl, C6-15 branched alkyl, aryl; n = 0-2; V = OC(O), N(Q)C(O), N(Q)C(S), C(O), SO<sub>2</sub>, P(O)(OH); Q = H, (unsatd.) alkyl; QX = atoms to form a C5-20 cyclic moiety Z = O, NH; when V = OC(O), Z = NH; R1, R2, R4 = (unsatd.) alkyl, cycloalkyl, aralkyl; R3, R5 = (CH<sub>2</sub>)<sub>m</sub>ANH<sub>2</sub>, (CH<sub>2</sub>)<sub>m</sub>ABC(NH<sub>2</sub>):NH; m = 1-6; A = bond, p-phenylene or p-cyclohexylene; B =

bond, NH; Y = H, Me], were prepared as antiinflammatories and analgesics (no data). Thus, title compound (I) was prepared via reaction of aldehyde II with BrF<sub>2</sub>CCO<sub>2</sub>Et in the presence of Zn in refluxing THF to give intermediate III. Drug formulations containing title compds. are given.

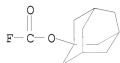
IT 62087-82-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of difluoropentapeptide derivs. as antiinflammatory and analgesic agents)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 79 OF 163 CAPLUS COPYRIGHT 2008 ACS on SIN

ACCESSION NUMBER: 1995:246509 CAPLUS

DOCUMENT NUMBER: 122:32016

TITLE: Preparation of N-substituted cycloalkyl and polycycloalkyl  $\alpha$ -substituted tryptophanylphenylalanine derivatives as drugs.

INVENTOR(S): Horwell, David C.; Pritchard, Martyn C.; Richardson, Reginald S.; Roberts, Edward; Aranda, Julian

PATENT ASSIGNEE(S): Warner-Lambert Co., USA

SOURCE: U.S., 105 pp. Cont.-in-part of U.S. Ser. No. 542,222, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

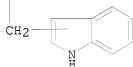
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
US 5278316	A	19940111	US 1990-629809	19901219
AU 9059628	A	19910117	AU 1990-59628	19900628
AU 644088	B2	19931202		
ZA 9005057	A	19920226	ZA 1990-5057	19900628
EP 479910	A1	19920415	EP 1990-911185	19900628
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
JP 04506079	T	19921022	JP 1990-510126	19900628
JP 2972331	B2	19991108		
CA 2060652	C	20010821	CA 1990-2060652	19900628
CA 2344707	C	20020730	CA 1990-2344707	19900628
CN 1049165	A	19910213	CN 1990-106804	19900629
FI 106197	B1	20001215	FI 1991-6060	19911220
NO 9105122	A	19920227	NO 1991-5122	19911227
NO 301831	B1	19971215		
US 5631281	A	19970520	US 1994-235814	19940428
US 5580896	A	19961203	US 1995-447142	19950522
US 5622983	A	19970422	US 1995-447141	19950522

## PRIORITY APPLN. INFO.:

US 1989-374327	B2 19890629
US 1989-422486	B2 19891016
US 1990-530811	B2 19900605
NZ 1990-234264	A 19900627
US 1990-545222	B2 19900628
US 1990-580811	B2 19900605
CA 1990-2060652	A3 19900628
WO 1990-US3553	A 19900628
US 1990-629809	A3 19901219
US 1992-958196	B2 19921007
US 1994-235814	B3 19940428

OTHER SOURCE(S): MARPAT 122:32016  
GI

R1ANHCR2CONR9CR3R12CR4R13Ar



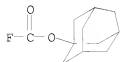
I

AB Title compds. [I; R1 = (substituted) C3-12 (poly)cycloalkyl; A = (CH2)nCO, SO2, SO, NHCO, (CH2)nO2C, SCO, O(CH2)nCO, HC:CHCO; n = 0-6; R2 = alkyl, HC:CH2, C.tplbond.CH, (CH2)nAr, (CH2)nOAr, etc.; R3, R4 = H, R2, etc.; R9 = H, alkyl, (CH2)nAr, (CH2)nOAr, etc.; R12, R13 = H, or each can be taken with R3 and R4 resp. to form a moiety doubly bonded to the C atom; Ar = (substituted) mono- or polycyclic carbo- or heterocyclic ring; the indole ring may be further substituted], were prepared I are cholecystokinin or gastrin agonists/antagonists with antianxiety, antiulcer, and antidepressant activity and are useful for preventing the withdrawal response produced by nicotine, diazepam, alc., cocaine, caffeine, or opiates. Thus, [R-(R\*,R\*)]-4-[[2-[[3-(1H-indol-3-yl)-2-methyl-1-oxo-2-[(tricyclo[3.3.1.1.3,7]dec-2-yloxy)carbonyl]amino]propyl]amino]-1-phenylethyl]amino]-4-oxobutanoic acid (II) (prepared in 7 steps starting from BOC-D-2-phenylglycinol) bound to central CCK receptors with Ki = 0.0085 μM, and inhibited feeding in rats with MPE50 = 17.4 mg/kg i.p. (MPE = maximum possible effect, i.e., zero food intake). II showed activity identical to that of diazepam in a light/dark anxiety test using mice.

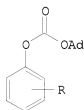
IT 62087-82-5, 1-Adamantyl fluoroformate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, in preparation of cholecystokinin analog)

RN 62087-82-5 CAPLUS

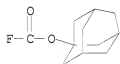
CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 80 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1994:508091 CAPLUS  
 DOCUMENT NUMBER: 121:108091  
 TITLE: 1-Adamantylloxycarbonyl: a novel protecting group for phenols carrying strongly electron-withdrawing substituents  
 AUTHOR(S): Niculescu-Duvaz, Ion; Springer, Caroline J.  
 CORPORATE SOURCE: Cancer Res. Campaign Cent. Cancer Therapeut., Inst. Cancer Res., Sutton/Surrey, SM2 5NG, UK  
 SOURCE: Journal of Chemical Research, Synopses (1994), (6), 242-3  
 CODEN: JRPSDC; ISSN: 0308-2342  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 121:108091  
 GI



AB A novel protection method for phenols carrying strongly electron-withdrawing substituents which involves reaction of 1-adamantyl fluoroformate with fluorophenols, nitrophenols and fluoronitrophenols has been developed. Fifteen new compds., I (Ad = 1-adamantyl, R = 4-NO<sub>2</sub>, 2-F-4-NO<sub>2</sub>, 2,6-F<sub>2</sub>, 2,3,4,5,6-F<sub>5</sub>, etc.), have been synthesized by this route.  
 IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (condensation of, with phenols)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



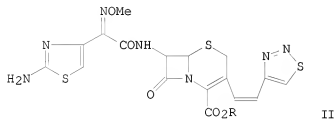
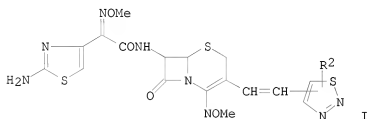
L4 ANSWER 81 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1994:435184 CAPLUS  
 DOCUMENT NUMBER: 121:35184



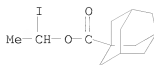
TITLE: Preparation of cephalosporin derivatives as bactericides for oral administration.  
 INVENTOR(S): Kobori, Takeo; Fujita, Mikako; Yamamoto, Rumi; Hyama, Tamejiro; Nagate, Takatoshi  
 PATENT ASSIGNEE(S): Sagami Chem Res, Japan; Taisho Pharma Co Ltd  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06025256	A	19940201	JP 1992-204281	19920709
PRIORITY APPLN. INFO.: OTHER SOURCE(S):	MARPAT 121:35184		JP 1992-204281	19920709

GI



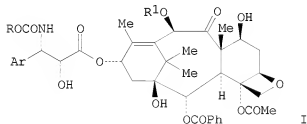
AB The title compds. I [R1 = H, ester residue easily cleaved by hydrolysis; R2 = H, alkyl] are prepared Title compound [(Z)(Z)]-II (R = H) (III)  
 (preparation given) in vitro exhibited MIC of 0.78 µg/mL against Staphylococcus aureus 209P-JC and Escherichia coli NIHJ JC-2. 0.5 H after oral administration of [(Z)(Z)]-II (R = CH2OCOCMe3) (IV) at 20 mg/kg to mice, the serum concentration of IV was 15.8 µg/mL. 0.5 H after oral administration of III to mice at 20 mg/kg, the serum concentration of III was 1.4 µg/mL.  
 IT 155723-37-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in preparation of bactericide)  
 RN 155723-37-8 CAPLUS  
 CN Tricyclo[3.3.1.1.3,7]decane-1-carboxylic acid, 1-iodoethyl ester (CA INDEX NAME)



L4 ANSWER 82 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1994:245556 CAPLUS  
 DOCUMENT NUMBER: 120:245556  
 TITLE: Preparation of taxane derivatives as antitumor agents  
 INVENTOR(S): Bourzat, Jean Dominique; Commercon, Alain  
 PATENT ASSIGNEE(S): Rhone-Poulenc Rorer SA, Fr.  
 SOURCE: PCT Int. Appl., 39 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9316060	A1	19930819	WO 1993-FR112	19930204
W: AU, CA, CZ, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2687151	A1	19930813	FR 1992-1381	19920207
FR 2687151	B1	19940325		
AU 9335050	A	19930903	AU 1993-35050	19930204
EP 625148	A1	19941123	EP 1993-904152	19930204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 07503477	T	19950413	JP 1993-513823	19930204
ZA 9300821	A	19930909	ZA 1993-821	19930205
FI 9403645	A	19940805	FI 1994-3645	19940805
NO 9402910	A	19940805	NO 1994-2910	19940805
PRIORITY APPLN. INFO.:			FR 1992-1381	A 19920207
			WO 1993-FR112	A 19930204

OTHER SOURCE(S): MARPAT 120:245556  
 GI



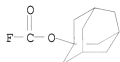
AB The title compds. I [Ar = aryl; R<sup>1</sup> = H, acetyl; R = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, Ph, etc.; a proviso is given], useful as antitumor agents (no data), were prepared Treatment of 4-acetoxy-2 $\alpha$ -benzoyloxy-5 $\beta$ ,20-epoxy-1-hydroxy-9-oxo-7 $\beta$ ,10 $\beta$ -bis[(2,2,2-

trichloroethoxy)carbonyloxy]-11-taxen-13 $\alpha$ -yl (2R, 3S)-3-amino-2-hydroxy-3-phenylpropionate with iso-Pr chloroformate in the presence of NaHCO<sub>3</sub>, followed by deprotection, gave (2R,3S)-I (Ar = Ph, R = iso-Pr, R1 = H). A formulation containing I is given.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in preparation of antitumor agent)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 83 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:135117 CAPLUS

DOCUMENT NUMBER: 120:135117

TITLE: Tetrapeptide CCK agonists: structure-activity studies on modifications at the N-terminus

AUTHOR(S): Elliott, Richard L.; Kopecka, Hana; Bennett, Michael J.; Shue, Youe Kong; Craig, Richard; Lin, Chun Wei; Bianchi, Bruce R.; Miller, Thomas R.; Witte, David G.; et al.

CORPORATE SOURCE: Neurosci. Res. Div., Abbott Lab., Abbott Park, IL, 60064, USA

SOURCE: Journal of Medicinal Chemistry (1994), 37(2), 309-13  
 CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

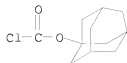
LANGUAGE: English

AB Analogs of the potent and selective tetrapeptide cholecystokinin-A (CCK-A) agonist Boc-Trp-Lys(CONHC6H4Me-2)-Asp-MePhe-NH<sub>2</sub> (A-7163; Boc = Me<sub>3</sub>CO<sub>2</sub>C) in which the N-terminal Boc functionality was systematically replaced with various amides, ureas, carbamates, and sulfonamides of differing size, hydrophobicity, and stereoelectronic properties were prepared and optimized for potency, selectivity, stability, and efficacy. In general, these analogs maintained good potency and selectivity for the CCK-A receptor (guinea pig pancreas), as well as potent anorectic activity in rats. Those analogs exhibiting equal or superior activity compared to A-71623 but differing physicochem. properties may represent superior drug candidates.

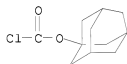
IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (acylation by, of tetrapeptide derivative, in preparation of cholecystokinin agonist)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 84 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1994:8953 CAPLUS  
 DOCUMENT NUMBER: 120:8953  
 TITLE: Stable isosteres of neurotensin C-terminal  
 pentapeptides derived by modification of the amide  
 function  
 AUTHOR(S): Christos, Thomas E.; Arvanitis, Argyrios; Cain, Gary  
 A.; Johnson, Alexander L.; Potorf, Richard S.; Tam, S.  
 William; Schmidt, William K.  
 CORPORATE SOURCE: Dupont Merck Pharm. Co., Wilmington, 19880-0353,  
 Germany  
 SOURCE: Bioorganic & Medicinal Chemistry Letters (1993), 3(6),  
 1035-40  
 CODEN: BMCLE8; ISSN: 0960-894X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A series of amide bond modified neurotensin C-terminal pentapeptides has  
 been prepared and tested for their in vivo analgesic properties. Reduced  
 amide function and trans double bond isosteres showed analgesic activity.  
 IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (acylation by, of aminomethylene and ethylene pseudopeptide derivs.)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 85 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:626432 CAPLUS  
 DOCUMENT NUMBER: 119:226432  
 TITLE: Preparation of tripeptide derivatives as analgesics  
 and antiinflammatories  
 INVENTOR(S): McIver, John McMillan  
 PATENT ASSIGNEE(S): Procter and Gamble Co., USA  
 SOURCE: PCT Int. Appl., 52 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9308211	A1	19930429	WO 1992-US8901	19921019
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9228827	A	19930521	AU 1992-28827	19921019
PRIORITY APPLN. INFO.:			US 1991-780607	A 19911023
			WO 1992-US8901	A 19921019

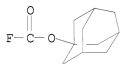
OTHER SOURCE(S): MARPAT 119:226432

AB X(CH2)nVZCHRCONHCHR1CONHCHR2COY [n = 0-2; R = (unsatd.) (cyclo)alkyl; R1 = R, aralkyl; R2 = (CH2)mANH2, (CH2)mABC(:NH)NH2; m = 1-5; A = bond, p-phenylene, 1,4-cyclohexanediyl; B = bond, NH; Y = H, CF3; Z = O, NH; V = CO2, NQCO, NQCS, CO, SO2, P(O)(OH); X = (cyclo)alkyl, aryl; Q = H, (unsatd.) alkyl; QX = cyclic moiety; the carbon bearing R has the D- or L-configuration; the carbons bearing R1, R2 have the L-configuration; with provisos], were prepared as in the analgesics and antiinflammatories (no data). Thus, BOC-D-Phe-Phe-Arg-H.OAc was prepared via coupling of BOC-D-Phe-Phe-OH (preparation given) with N-carbobenzylloxymidino-2-aminovalerolactam.HCl (preparation given) using Et3N/NCP(O)(OEt)2 in CH2Cl2 followed by LiAlH4 reduction and hydrogenolysis over Pd/C. Dosages and formulations of specific title compds. are given.

IT 62087-82-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, in prepn of tripeptide analgesic and antiinflammatory)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 86 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:617414 CAPLUS

DOCUMENT NUMBER: 119:217414

TITLE: Peptide aldehyde analogs for trypsin inhibitors

INVENTOR(S): Brunck, Terence Kevin; Pepe, Michael Gary; Pearson, Daniel Andrew; Webb, Thomas Roy

PATENT ASSIGNEE(S): Corvas International, Inc., USA

SOURCE: PCT Int. Appl., 61 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

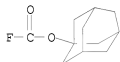
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9314779	A1	19930805	WO 1993-US906	19930129
W: CA, JP				

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 EP 627925 A1 19941214 EP 1993-905778 19930129  
 EP 627925 B1 20040929  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE  
 JP 07503715 T 19950420 JP 1993-513488 19930129  
 US 5534498 A 19960709 US 1993-11666 19930129  
 AT 277943 T 20041015 AT 1993-905778 19930129  
 CA 2128711 C 20050111 CA 1993-2128711 19930129  
 PRIORITY APPLN. INFO.: US 1992-828388 A 19920130  
 US 1993-11666 A 19930129  
 WO 1993-US906 W 19930129  
 OTHER SOURCE(S): MARPAT 119:217414  
 AB Peptide aldehyde analogs are disclosed which have substantial potency and specificity as inhibitors of mammalian pancreatic trypsin. The compds. of the invention are useful in the prevention and treatment of tissue damage or destruction associated with pancreatitis. Preparation of the analogs is described. Thus, N-t-butoxycarbonyl-L-Asp-L-Pro-L-argininal (I) (preparation given) had a Ki against trypsin of 0.00045  $\mu$ M. The effectiveness of I in an animal model for pancreatitis was also demonstrated.  
 IT 62087-82-5, Adamantylloxycarbonyl fluoride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in peptide aldehyde analog preparation for trypsin inhibitor)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 87 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:603857 CAPLUS  
 DOCUMENT NUMBER: 119:203857  
 TITLE: Preparation of modified peptides transportable into the central nervous system  
 INVENTOR(S): Arvantis, Argyrios; Cain, Gary Avonn; Christos, Thomas Eugene; Confalone, Pasquale Nicholas; Pottorf, Richard Scott; Schmidt, William Koch  
 PATENT ASSIGNEE(S): Du Pont Merck Pharmaceutical Co., USA  
 SOURCE: PCT Int. Appl., 111 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9300359	A1	19930107	WO 1992-US4968	19920618
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
AU 9222381	A	19930125	AU 1992-22381	19920618
PRIORITY APPLN. INFO.:			US 1991-723616	A 19910627

WO 1992-US4968 A 19920618

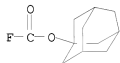
OTHER SOURCE(S): MARPAT 119:203857

AB YWmXnA1-H-A-B-C-D-E-F-Z [Y = lipophilic moiety LCO, R(CH<sub>2</sub>)<sub>p</sub> (O(CH<sub>2</sub>)<sub>r</sub>; p, r = 0-6; L = (substituted) alkyl, perfluoroalkyl, cycloalkyl, bicycloalkyl, tricycloalkyl, etc.; R = cycloalkyl, heterocyclyl, (substituted) aryl; W = Arg, D-Arg, D-Lys, Pro, Mle, Lys, Orn, homoarginine, 2,4-diaminobutyric acid, 2,3-diaminopropionic acid, N-methylnorleucine, 4-aminocyclohexylalanine residues; X = W, Ala, etc.; m, n = 0,1; A, Al, C, E = CONH, CONMe, NMeCO, CH<sub>2</sub>NH, CH<sub>2</sub>O, CH<sub>2</sub>S, CSNH, NHCONH, SOCH<sub>2</sub>, SO<sub>2</sub>CH<sub>2</sub>, NHSC, CH:CH, CH<sub>2</sub>CH<sub>2</sub>, CF<sub>2</sub>CF<sub>2</sub>, CF:CF, CF:CH, CH<sub>2</sub>CH(OH), cyclopropylene, 4,5-tetrazolylidyl, etc.; H = Pro, N-methylaminobutyric acid residue; B = Tyr, Phe, Trp, naphthylalanine, phenylglycine, β-phenylproline residues; D = Ile, Leu, tert-leucine, phenylglycine residues; F = Leu, Val, Met; Z = OH, alkoxyl, were prepared Thus, Q-Arg-Pro-Tyr-Ile-Leu-OH.HOAC (Q = 1-adamantanecarbonyl), prepared by solid phase coupling on phenylacetamidomethyl resin using BOC-protected amino acids and DCC/1-hydroxybenzotriazole, showed K<sub>i</sub> = 144 nM in a neurotensin binding assay and ED<sub>50</sub> = 14 mg/kg i.v. in the phenylquinone writhing test in mice.

IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in preparation of neurotensin analog)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 88 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:517787 CAPLUS

DOCUMENT NUMBER: 119:117787

TITLE: Rationally designed 'dipeptoid' analogs of cholecystokinin (CCK): N-terminal structure-affinity relationships of α-methyl-tryptophan derivatives

AUTHOR(S): Eden, J. M.; Higginbottom, M.; Hill, D. R.; Horwell, D. C.; Hunter, J. C.; Martin, K.; Pritchard, M. C.; Rahman, S. S.; Richardson, R. S.; Roberts, E.

CORPORATE SOURCE: Parke-Davis Neuroscience Research Centre, Cambridge, CB2 2QB, UK

SOURCE: European Journal of Medicinal Chemistry (1993), 28(1), 37-45  
 CODEN: EJMCAS; ISSN: 0223-5234

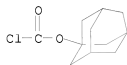
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The structure-affinity relationships (SAR) between the N-termini of a series of α-methyltryptophan phenethylamide derivs. and the cholecystokinin (CCK) B receptor are discussed. A series of compds. R-X-DL-αMeTrp-NHCH<sub>2</sub>CH<sub>2</sub>Ph [I; αMeTrp = α-methyltryptophan, R = cycloalkyl, bicycloalkyl, tricycloalkyl group, X = O<sub>2</sub>C, SCO, NHCO, CH<sub>2</sub>CO, S(O)] were prepared The CCK-B receptor binding affinities of I are discussed. The SAR form part of a systematic program for the rational design of 'dipeptoid' analogs of the neuropeptide CCK.

Beginning with I (R = Me3C, X = O2C), the N-terminal moiety was systematically changed for groups of varying size, shape and lipophilicity until the optimal N-terminal group was obtained and the favored linking group chosen, resulting in RO2C-D- $\alpha$ MeTrp-NHCH2CH2Ph (R = 2-adamantyl), with an IC50 = 32 nM in the CCK-B receptor binding affinity assay.

IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (amidation of, with methyltryptophan phenethylamide)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 89 OF 163 CAPLUS COPYRIGHT 2008 ACS on SIN

ACCESSION NUMBER: 1993:496128 CAPLUS

DOCUMENT NUMBER: 119:96128

TITLE: Investigations with selective deblocking reagents for

Adpoc-protected amino acids and peptides

AUTHOR(S): Voelter, Wolfgang; Kalbacher, Hubert

CORPORATE SOURCE: Physiol. chem. Inst., Univ. Tuebingen, Tuebingen,

W-7400, Germany

SOURCE: Liebigs Annalen der Chemie (1993), (2), 131-6

CODEN: LACHDL; ISSN: 0170-2041

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 119:96128

AB Selective reagents for the removal of the Adpoc (adamantylisopropoxycarbonyl) group have been developed. For this purpose several peptides containing tryptophan and N $\epsilon$ -tert-butoxycarbonyllysine have been synthesized. Among several acidolytic reagents, 0.1 N HCl/CF3CH2OH/CHCl3 (1:9:1) and 50% HCOOH/CF3CH2OH/CHCl3 (1:9:1) show high selectivity especially for the N $\epsilon$ -tert-butyloxycarbonyl group of lysine. Cleavage rates are determined by HPLC and TLC.

IT 74654-74-3

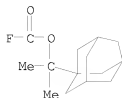
RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with amino acids)

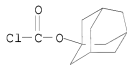
RN 74654-74-3 CAPLUS

CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)





L4 ANSWER 90 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:473082 CAPLUS  
 DOCUMENT NUMBER: 119:73082  
 TITLE: Synthesis and application of N,N-bis-(1-adamantyloxycarbonyl) amino acids  
 AUTHOR(S): Nyasse, Barthelemy; Ragnarsson, Ulf  
 CORPORATE SOURCE: Biomed. Cent., Univ. Uppsala, Uppsala, S-751 23, Swed.  
 SOURCE: Acta Chemica Scandinavica (1993), 47(4), 374-9  
 CODEN: ACHSE7; ISSN: 0904-213X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The preparation of novel N,N-bis(1-adamantyloxycarbonyl)amino acid derivs. has been undertaken and their properties studied. Among them, the p-nitrophenyl esters were subsequently applied to the stepwise synthesis of Leu-enkephalin. In the last coupling step, some hydantoin formation was encountered but it was nearly completely overcome by working with more concentrated solns. The preparation of a tyrosine derivative presented special problems owing to the existence of the phenolic group in the precursor. The relative stability of 1-adamantyloxycarbonyl as N- and O-protecting groups was also studied.  
 IT 5854-52-4P, 1-Adamantyl chloroformate  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and acylation by, of amino acid esters)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 91 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:254184 CAPLUS  
 DOCUMENT NUMBER: 118:254184  
 TITLE: Kinetics of the solvolysis of 1-adamantyl fluoroformate under high pressure  
 AUTHOR(S): Kyong, Jin Burm; Kevill, Dennis N.; Kim, Jong Chul  
 CORPORATE SOURCE: Dep. Chem., Hanyang Univ., Ansan, 425-791, S. Korea  
 SOURCE: Journal of the Korean Chemical Society (1993), 37(1), 3-9

CODEN: JKCSEZ; ISSN: 1017-2548

DOCUMENT TYPE:

Journal

LANGUAGE:

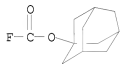
Korean

AB Specific rates of solvolysis of 1-adamantyl fluoroformate in hydroxylic solvents have been measured by an elec. conductivity method under various pressures. The activation parameters ( $\Delta V_0^{\text{thermod.}}$ ,  $\Delta \beta^{\text{thermod.}}$ ,  $\Delta H^{\text{thermod.}}$ ,  $\Delta S^{\text{thermod.}}$ ) and average pressure within the solvation shell of the activated complex (charge development) have been estimated from the rates. Also, the selectivities for the formation of solvolysis products in aqueous ethanol have been determined by response-calibrated gas chromatog. The values of  $\Delta V_0^{\text{thermod.}}$  and  $\Delta \beta^{\text{thermod.}}$  are both neg., but  $\Delta H^{\text{thermod.}}$  is pos. and  $\Delta S^{\text{thermod.}}$  is large and neg. This behavior is discussed in terms of electrostriction of solvation. The solvolysis has two major reaction pathways.

IT 62087-82-5, 1-Adamantyl fluoroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (solvolysis of, under high pressure, kinetics of)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 92 OF 163 CAPLUS COPYRIGHT 2008 ACS on SIN

ACCESSION NUMBER: 1993:190951 CAPLUS

DOCUMENT NUMBER: 118:190951

TITLE: Solvolysis of 1-(3-noradamantyl)ethyl sulfonates

AUTHOR(S): Stoelting, D. T.; Shiner, V. J., Jr.

CORPORATE SOURCE: Dep. Chem., Indiana Univ., Bloomington, IN, 47405, USA

SOURCE: Journal of the American Chemical Society (1993), 115(5), 1695-705

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE:

Journal

LANGUAGE:

English

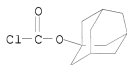
OTHER SOURCE(S):

CASREACT 118:190951

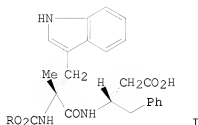
AB The title esters solvolyze in aqueous EtOH almost entirely to rearranged substitution products (2-methyl-1-adamantyl alc. and ether) at a rate about 1000 times faster than unstrained analogs; the reaction obeyed a non-first-order rate law, was not accompanied by O scrambling, and involved the production of large proportions of the rearranged tertiary 2-methyl-1-adamantyl sulfonate esters as reactive intermediates. The tertiary esters solvolyze to unrearranged substitution products at a rate 2-7 times faster than the noradamantyl isomers in clean first-order reactions accompanied by O scrambling. The formation of rearranged tertiary esters as reactive intermediates in the solvolyses of the secondary esters and the O scrambling during solvolysis of the tertiary esters both show that the solvolyses of the tertiary esters involve large proportions of internal return and are therefore not kc processes. In addition, solvent effects on the partitioning of the tertiary esters tight ion pair between covalent substrate and products are significant and lead

to a Grunwald-Winstein  $m$  for internal return that is about 0.5 less than that for solvent separation; this result provides an explanation for the larger-than-average  $m$  values observed for 1-adamantyl systems. The  $\beta$ -d3 rate effects for solvolysis for the 1-(3-noradamantyl)ethyl esters are in the narrow range of 1.14-1.15, smaller than the value of  $\approx 1.20$  shown by 3,3-dimethyl-2-butyl sulfonates and indicative of C atom  $\sigma$ -participation and strong C atom hyperconjugation. The accelerated solvolysis rates, the absence of internal return, and the lowered isotope effects clearly establish this solvolysis as a  $k_A$  process. Plots of  $\log k$  values vs YOTs for the title esters give slopes ( $m$ ) around 0.7; the  $m$  values for the adamantyl isomers are around 1. The differences between these plots for structurally very similar reactants solvolyzing with clearly different rate-determining steps are not large and indicate the hazards in using rate correlations to establish solvolytic reaction mechanisms, especially when comparing reactants with greater structural differences. The higher homologs, 1-(3-noradamantyl)propyl sulfonate esters, behaved similarly.

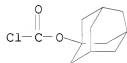
IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
 (solvolysis of, kinetics and mechanism of)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



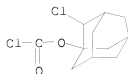
L4 ANSWER 93 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:169582 CAPLUS  
 DOCUMENT NUMBER: 118:169582  
 TITLE: Cholecystokinin dipeptoid antagonists: design, synthesis, and anxiolytic profile of some novel CCK-A and CCK-B selective and mixed CCK-A/CCK-B antagonists  
 AUTHOR(S): Boden, P. R.; Higginbottom, M.; Hill, D. R.; Horwell, D. C.; Hughes, J.; Rees, D. C.; Roberts, E.; Singh, L.; Suman-Chauhan, N.; Woodruff, G. N.  
 CORPORATE SOURCE: Parke-Davis Neurosci. Res. Cent., Cambridge, CB2 2QB, UK  
 SOURCE: Journal of Medicinal Chemistry (1993), 36(5), 552-65  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



- AB The design, synthesis, and structure-activity relationships (SAR) for the development of selective dipeptoid ligands for both of the cholecystokinin (CCK) receptor subtypes CCK-A and CCK-B are described. The SAR developed is used to design a ligand with equal nanomolar binding affinity for both the CCK-A and CCK-B receptor. The CCK-B selective compds. are antagonists in electrophysiol. tests on the rat ventromedial nucleus of the hypothalamus with equilibrium constant  $K_e = 2.8$  nM for I (R = 2-adamantyl) (II) and are also anxiolytic in the mouse light/dark box test with a min. ED = 0.01 mg/kg, s.c., for II. The CCK-A selective compds. are also competitive antagonists by the inhibition of CCK-8S-evoked amylase secretion from pancreatic acinar cells with  $K_e = 16$  nM for the enantiomer of II (III). In electrophysiol. tests on the rat dorsal raphe (an area rich in CCK-A receptors), III had  $K_e = 12.8$  nM. The mixed CCK-A/CCK-B compound I [R = (S,S)-trans-2-methylcyclohexyl] showed antagonistic properties in both CCK-A and CCK-B models; thus it inhibited CCK-8S-evoked amylase secretion from pancreatic acinar cells and is anxiolytic in the light/dark box paradigm. It is concluded, therefore, that the CCK-B receptor (and not the CCK-A receptor) is responsible for the anxiolytic properties of these compds. in these test models.
- IT 5854-52-4, 1-Adamantyl chloroformate 146516-55-4,  
2-Chloro-1-adamantyl chloroformate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(acylation by, of methyltryptophan derivs. in preparation of cholecystokinin receptor antagonists)
- RN 5854-52-4 CAPLUS
- CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



- RN 146516-55-4 CAPLUS
- CN Carbonochloridic acid, 2-chlorotricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 94 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:634550 CAPLUS  
 DOCUMENT NUMBER: 117:234550  
 TITLE: Amino acid analogs as CCK antagonists.  
 INVENTOR(S): Horwell, David Christopher; Aranda, Julian;  
 Augelli-Szafran, Corinne Elizabeth; Bette, Hans  
 Jurgen; Holmes, Ann; Mullican, Michael David;  
 Pritchard, Martyn Clive; Richardson, Reginald Stewart;  
 Roth, Bruce David; et al.  
 PATENT ASSIGNEE(S): Warner-Lambert Co., USA  
 SOURCE: PCT Int. Appl., 209 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

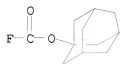
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9204025	A1	19920319	WO 1991-US6181	19910829
W: AU, CA, FI, JP, KR, NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5331006	A	19940719	US 1991-726656	19910712
AU 9186538	A	19920330	AU 1991-86538	19910829
PRIORITY APPLN. INFO.:			US 1990-576308	A 19900831
			US 1991-726656	A 19910712
			WO 1991-US6181	A 19910829

OTHER SOURCE(S): MARPAT 117:234550

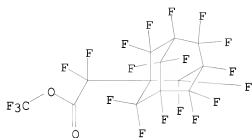
GI For diagram(s), see printed CA Issue.

AB The title compds. [I; R1 = cycloalkyl, polycycloalkyl hydrocarbonyl, etc.; A = (CH<sub>2</sub>)<sub>n</sub>CO, SO<sub>2</sub>, S(O), NHCO, OC(O), etc.; n = 0-6; R2 = alkyl, CH<sub>2</sub>, C, tpbond, CH, aminoalkyl, etc.; R3, R4 = H, R2, (CH<sub>2</sub>)<sub>m</sub>-B-D; m = 0-3; B = bond, OCO(CH<sub>2</sub>)<sub>n</sub>, O(CH<sub>2</sub>)<sub>n</sub>, NHCO(CH<sub>2</sub>)<sub>n</sub>, CONH(CH<sub>2</sub>)<sub>n</sub>, CO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>, NHCOCH<sub>2</sub>CH, CO(CH<sub>2</sub>)<sub>n</sub>, etc.; D = (substituted) carboxy, hydroxymethyl, etc.; R9 = H, alkyl, etc.; R12, R13 = H; or R12R13 = bond, R13R4 = bond; Ar = mono- or polycyclic (substituted) carbo- or heteroarom. or carbo- or heterohydroarom. moiety; Ar2 = Ar, 1H-indol-yl, (CH<sub>2</sub>)<sub>n</sub>NHC(:NH)NHN02, CH<sub>2</sub>CO<sub>2</sub>Me], useful for treatment of pain, panic disorder, drug dependence, as well as alcoholism, are prepared 2-Methyl-3-(1-naphthyl)alanine Me ester (preparation given) was N-acylated with 2-adamantylloxycarbonyl chloride, the product was hydrolyzed, and the product was amidated with phenethylamine to give I [R1 = 2-adamantyl, A = OC(O), R2 = Me, R3 = R4 = R9 = R12 = R13 = H, Ar = Ph, Ar2 = 1-naphthyl]. This showed a K<sub>i</sub>, defined as IC<sub>50</sub>/(1+[L]K<sub>a</sub>) (K<sub>a</sub> being the equilibrium dissociation constant and [L] the concentration of the radiolabel) of 14 M. I were also tested for their ability in treating gastric damage by aspirin, anxiolytic activity, and for treating drug addiction.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in preparation of CCK antagonists)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 95 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:489873 CAPLUS  
 DOCUMENT NUMBER: 117:89873  
 TITLE: Aerosol fluorination of 1-chloroadamantane, 2-chloroadamantane, and methyl 1-adamantylacetate: a novel synthetic approach to 1- and 2-substituted hydryl-, methyl-, and (difluoromethyl-F-adamantanes Adcock, James L.; Luo, Huimin; Zuberi, Sharique S. Dep. Chem., Univ. Tennessee, Knoxville, TN, 37996-1600, USA  
 SOURCE: Journal of Organic Chemistry (1992), 57(17), 4749-52 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 117:89873  
 AB 1-Chloroperfluoroadamantane (I) and 2-chloroperfluoroadamantane (II) have been synthesized by aerosol direct fluorination of the corresponding hydrocarbons for the first time. The conversion of I and II to 1- and 2-methylperfluoroadamantane using MeLi and to 1- and 2-hydrylperfluoroadamantane by two different methods is described. The aerosol direct fluorination of the Me ester of 1-adamantaneacetic acid gave the perfluorinated analog and the analogous acid fluoride, from which 1-difluoromethylperfluoroadamantane was synthesized in good yield. All comds. were characterized by <sup>19</sup>F-NMR, FTIR, mass spectrometry and elemental anal.  
 IT 82829-41-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and sequential hydrolysis and decarboxylation of)  
 RN 82829-41-2 CAPLUS  
 CN Tricyclo[3.3.1.1.3,7]decane-1-acetic acid,  $\alpha,\alpha,2,2,3,4,4,5,6,6,7,8,8,9,9,10,10$ -heptadecafluoro-, trifluoromethyl ester (CA INDEX NAME)



L4 ANSWER 96 OF 163 CAPLUS COPYRIGHT 2008 ACS on SIN

ACCESSION NUMBER: 1992:440368 CAPLUS

DOCUMENT NUMBER: 117:40368

TITLE: New water-soluble pilocarpine derivatives with enhanced and sustained muscarinic activity

AUTHOR(S): Druzgala, Pascal; Winwood, David; Drewniak-Deyrup, Malgorzata; Smith, Scott; Bodor, Nicholas; Kaminski, James J.

CORPORATE SOURCE: Xenon Vision, Inc., Alachua, FL, 32615, USA

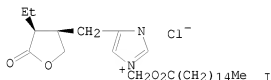
SOURCE: Pharmaceutical Research (1992), 9(3), 372-7

CODEN: PHREEB; ISSN: 0724-8741

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



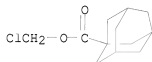
AB The synthesis of an homologous series of new water-soluble derivs. of pilocarpine is described. The new compds., referred to as soft quaternary salts, are water soluble by virtue of a cationic ammonium head and their lipophilicity can be modulated by manipulating the size and the nature of the substituent in the inactive portion of the mol. The miotic activity of the compds. was evaluated after administration to normotensive New Zealand White rabbits. Changes in pupil size indicated a substantial cholinergic effect on the iridal sphincter musculature. The best candidate, I which has a 16-carbon side chain, was evaluated for reduction of the intraocular pressure in genetically glaucomatous beagles. I is superior to pilocarpine in both tests, with a potency 10-20-fold that of the parent compound and a longer duration of action. The new compds. are prodrug forms of pilocarpine which greatly enhance the corneal bioavailability of the parent compound

IT 71570-32-6P 142059-93-6P

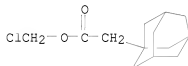
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction with pilocarpine)

RN 71570-32-6 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid, chloromethyl ester (CA INDEX NAME)



RN 142059-93-6 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-acetic acid, chloromethyl ester (CA INDEX NAME)



L4 ANSWER 97 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:408489 CAPLUS  
 DOCUMENT NUMBER: 117:8489  
 TITLE: Preparation of tetrapeptide cholecystokinin agonists  
 INVENTOR(S): Shiosaki, Kazumi; Nadzan, Alex M.; Kopecka, Hana;  
 Shue, Youe Kona; Holladay, Mark W.; Lin, Chun W.;  
 Nellans, Hugh N.  
 PATENT ASSIGNEE(S): Abbott Laboratories, USA  
 SOURCE: PCI Int. Appl., 216 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9119733	A1	19911126	WO 1991-US4458	19910620
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5270302	A	19931214	US 1991-713010	19910617
PRIORITY APPLN. INFO.:			US 1990-541230	A 19900620
			US 1991-713010	A 19910614
			US 1988-287955	B2 19881221
			WO 1989-US5673	A 19891218
OTHER SOURCE(S):	MARPAT 117:8489			
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

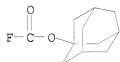


AB XYZQ [X = R3(CH2)nCR1R2CR4R5, (indole ring substituted) Q1; R1 = H, OH, halo, alkyl, alkoxy, haloalkyl, alkanoyl, alkoxycarbonyl, aminocarbonyl, cyano, (acyl)amino, etc; R2 = H, alkyl; R3 = bicyclic carbocyclyl, heterocyclyl; R4, R5 = H; or R4R5 = O, n = 1,2; Y = R10HN(CH2)n CH(NR9)CR11R12, R13NCOA(CH2)4CH(NR9)CR11R12; R9 = H, alkyl; R10 = C(:G)NHR13, CO(CH2)pR14, etc.; G = O, S, p = 0, 1, 2; R13 = (cyclo)alkyl, alkenyl, mono- or bicyclic heterocyclyl, etc.; R14 = cycloalkyl, mono- or bicyclic heterocyclyl, (substituted) aryl; R11, R12 = H; or R11R12 = O; A = O, CH2; Z = R17(CH2)rCH(NR16)U; U = CO, CH2, CH2CO; r = 1 when U = CO, CH2; r = 0 when U = CH2CO; R16 = H, alkyl; R17 (prodrug ester of) CO2H; Q = NR23CR24R26(CH2)sR25; s = 1, 2; R23 = H, alkyl; R24 = H, Me; or R23R24 = (CH2)3; R25 = aryl, mono- or bicyclic heterocyclyl, cycloalkyl; R26 = (substituted) carbamoyl were prepared. Thus, title peptide I, prepared by solution phase methods, inhibited feeding in rats with ED50 = 1.3 nmole/kg i.p.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in preparation of cholecystokin agonist)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 98 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:40642 CAPLUS

DOCUMENT NUMBER: 116:40642

TITLE: Multiple pathways in the solvolysis of 1-adamantyl fluoroformate

AUTHOR(S): Kevill, Dennis N.; Kyong, Jin Burm

CORPORATE SOURCE: Dep. Chem., North. Illinois Univ., DeKalb, IL, 60115, USA

SOURCE: Journal of Organic Chemistry (1992), 57(1), 258-65

CODEN: JOCEAH; ISSN: 0022-3263

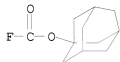
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Reactions of 1-adamantyl fluoroformate in hydroxylic solvents have been studied. In solvents of high ionizing power and relatively low nucleophilicity, such as 2,2,2-trifluoroethanol-water mixts., the reactions parallel those of 1-adamantyl chloroformate, and only solvolysis-decomposition reaction is observed. However, differing from the reactions of the corresponding chloroformate, in other solvents appreciable ams. of attack at acyl carbonyl occur, more than 90% in ≥80% aqueous ethanol. Entropies of activation for attack at acyl carbon are considerably more neg. than for solvolysis-decomposition. For the solvolysis-decomposition, a Grunwald-Winstein m value of 0.70 is observed. The kCl/kF ratios for solvolysis-decomposition are in the range of 104-105, suggesting appreciable C-X bond breaking in the transition state of the rate-determining step and arguing against rate-determining formation of a 1-Ad+(OCOX)-

ion pair. Attack at acyl carbon is analyzed in terms of the two-term Grunwald-Winstein equation, and sensitivities toward changes in nucleophilicity and ionizing power are identical to those for solvolyses of *n*-octyl fluoroformate, which are believed to proceed via a tetrahedral intermediate. For each of the major pathways, selectivities toward the components of binary hydroxylic solvents are reported and discussed.

IT 62087-82-5  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
 (solvolysis of, kinetics and mechanism of)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 99 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:205140 CAPLUS

DOCUMENT NUMBER: 114:205140

TITLE: Fully synthetic immunogens. Part III. Synthesis of hinge-peptide/gastrin conjugates and their immunological properties

AUTHOR(S): Wuensch, E.; Moroder, L.; Huebener, G.; Musiol, H. J.; Von Gruenigen, R.; Goehring, W.; Scharf, R.; Schneider, C. H.

CORPORATE SOURCE: Dep. Peptide Chem., Max Planck Inst. Biochem., Martinsried, Germany

SOURCE: International Journal of Peptide & Protein Research (1991), 37(2), 90-102

CODEN: IJPPC3; ISSN: 0367-8377

DOCUMENT TYPE: Journal

LANGUAGE: English

AB As the core mol. for multiple attachment of antigenic peptides the human IgG1 hinge fragment 225-223/225'-232' was selected. Two types of conjugates of this double-chain biscysteinyl hinge-peptide were prepared (i) by linking its C-termini to [Nle15]-human-little-gastrin-[2-17] and (ii) by elongating the resulting hinge-peptide/[Nle15]-little-gastrin-[2-17] conjugate at the two N-termini with the human big-gastrin sequence 1-14 to produce the big-gastrin-[1-14]/hinge-peptide/little-gastrin-[2-17] conjugate. For the synthesis of these peptide structures both the route via the preformed double-chain biscysteinyl peptide and the route via suitably protected monomeric bis-cysteinyl peptides were used. For the latter approach advantage was taken of the previous observation about the preferred oxidation of the biscysteinyl hinge-peptide 225-232 to the dimer in parallel alignment. Both synthetic routes led to identical products. Immunization expts. in guinea pigs with the synthetic hybrids led to surprisingly strong immune responses with anti-little-gastrin antibody titers comparable to those induced by the iso-1-cytochrome c/little-gastrin-[2-17] conjugate as carrier-hapten system. The 2 gastrin constructs are fully competent immunogens. Addnl., the gastrin receptor-like specificity of the antibodies indicates that both the

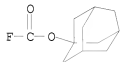
synthetic hybrids and the cytochrome c conjugate allow for expression of a little-gastrin-specific conformational epitope similar to the bioactive structure of this hormone. The usefulness of such synthetic hybrids is further confirmed by the observation that the bivalent immunogen, containing both the little-gastrin 2-17 and the big-gastrin 1-14 sequence, is capable of inducing an immune response against both antigenic sequences, although with different efficiency.

IT 62087-82-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with peptide derivative)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

L4 ANSWER 100 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:102854 CAPLUS

DOCUMENT NUMBER: 114:102854

TITLE: Preparation of acyldipeptidocarboxaldehydes as proteinase inhibitors

INVENTOR(S): Higuchi, Naoki; Saitoh, Masayuki; Shibata, Hiroshi

PATENT ASSIGNEE(S): Suntory, Ltd., Japan

SOURCE: Eur. Pat. Appl., 33 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 393457	A1	19901024	EP 1990-106738	19900409
EP 393457	B1	19940706		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 02268145	A	19901101	JP 1989-89904	19890410
JP 2701932	B2	19980121		
US 5081284	A	19920114	US 1989-373811	19890629
ES 2058653	T3	19941101	ES 1990-106738	19900409
US 5510531	A	19960423	US 1994-318557	19941005
PRIORITY APPLN. INFO.:			JP 1989-89904	A 19890410
			US 1989-373811	A2 19890629
			US 1991-743135	B1 19910809
			US 1993-58669	B1 19930510

OTHER SOURCE(S): CASREACT 114:102854; MARPAT 114:102854

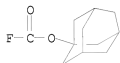
AB R1R2NCH<sub>3</sub>CONHCH<sub>2</sub>R4CHO [I; R1 = acyl, (cyclic) alkoxy carbonyl, (substituted) PhCH<sub>2</sub>O<sub>2</sub>C, Cl<sub>3</sub>CC<sub>2</sub>O<sub>2</sub>C, Me<sub>3</sub>SiCH<sub>2</sub>CH<sub>2</sub>O<sub>2</sub>C, tosyl, 2-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>S, Ph<sub>2</sub>P(S), Ph<sub>3</sub>C, PhCOCH<sub>2</sub>Me; R2 = H; R1R2 = phthaloyl; R3 Bu, Me<sub>2</sub>CHCH<sub>2</sub>, Me<sub>2</sub>CH; R4 = Bu], were prepared. Thus, Me(CH<sub>2</sub>)<sub>6</sub>COCl and 1N NaOH were added to a mixture of H-Leu-OH and 1N NaOH with ice cooling and the mixture was stirred 8 h at room temperature to give Me(CH<sub>2</sub>)<sub>6</sub>CO-Leu-OH. The latter was coupled with

norleucine Me ester-HCl in DMF using (EtO)2P(O)CN/Et3N at room temperature; the product was reduced with NaBH4 in Me3COH/MeOH followed by reoxidn. with SO3/pyridine/Et3N/Me2SO to give Me(CH2)6CONHCH(CH2CHMe2)CONHCH[(CH2)3Me]CHO. I inhibited calpain II with IC50 of 1.2-1.3 + 10-7M, and inhibited cathepsin B with IC50 of 7.9 + 10-8 - 9.9 + 10-5M.

IT 62087-82-5, Adamantylloxycarbonyl fluoride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (acylation by, of leucine, in preparation of proteinase inhibitor)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 101 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:82478 CAPLUS

DOCUMENT NUMBER: 114:82478

TITLE: Amino acids and peptides. 76. Lavendomycin: total synthesis and assignment of configuration

AUTHOR(S): Schmidt, Ulrich; Munding, Klaus; Mangold, Rainer; Lieberknecht, Albrecht

CORPORATE SOURCE: Inst. Org. Chem. Isotopenforsch., Univ. Stuttgart, Stuttgart, D-7000/80, Germany

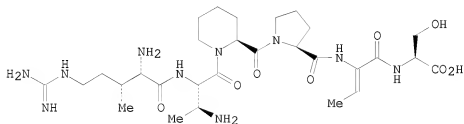
SOURCE: Journal of the Chemical Society, Chemical Communications (1990), (18), 1216-19

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 114:82478

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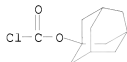
I

AB (-)-Lavendomycin (I), a highly potent hexapeptide antibiotic with very low toxicity, was prepared by solution methods.

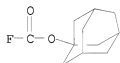
IT 5854-52-4

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (acylation by, of arginine derivative)

RN 5854-52-4 CAPLUS  
CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



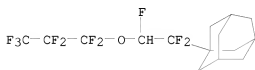
L4 ANSWER 102 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1990:611518 CAPLUS  
DOCUMENT NUMBER: 113:211518  
TITLE: New reagents for exhaustive alkoxy carbonylation of amides and urethanes. Di-1-adamantyl di- and tricarbonates  
AUTHOR(S): Koennecke, Andreas; Grehn, Leif; Ragnarsson, Ulf  
CORPORATE SOURCE: Biomed. Cent., Univ. Uppsala, Uppsala, S-751 23, Swed.  
SOURCE: Tetrahedron Letters (1990), 31(19), 2697-700  
CODEN: TELEAY; ISSN: 0040-4039  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 113:211518  
AB Di-1-adamantyl di- and tricarbonates and Me3CO(CO2)3CMe3 are useful reagents for the DMAP-catalyzed alkoxy carbonylation of amides and urethanes. E.g., treatment of AcNHPh with di-1-adamantyl dicarbonate and DMAP gave 90% AcNPhCO2R (R = 1-adamantyl).  
IT 62087-82-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(alkoxy carbonylation with, of acetanilide)  
RN 62087-82-5 CAPLUS  
CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



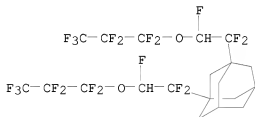
L4 ANSWER 103 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1990:477752 CAPLUS  
DOCUMENT NUMBER: 113:77752  
TITLE: Radiochemical alkylation of adamantane by perfluorovinyl ethers  
AUTHOR(S): Machula, A. A.; Podkhalyuzin, A. T.; Shapet'ko, N. N.  
CORPORATE SOURCE: Nauchno-Issled. Fiz.-Khim. Inst. im. Karpova, Moscow, USSR  
SOURCE: Khimiya Vysokikh Energii (1990), 24(2), 117-21  
CODEN: KHVKAQ; ISSN: 0023-1193  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
AB Title reaction with CF2:CFR [I; R = OC3F7-n, O(CF2)3OCF3] and a 60Co

source in EtOAc at 308-373 K gave 1- and 1,3-dialkylation products via a complex mechanism. A kinetic anal. yielded activation energies of .apprx.16-17 kJ/mol. I [R = OCF<sub>3</sub>, OCF<sub>2</sub>CF(CF<sub>3</sub>)OC<sub>3</sub>F<sub>7</sub>-n] were of comparable reactivity to the above, but that of I [R = CF<sub>3</sub>, O[CF<sub>2</sub>CF(CF<sub>3</sub>)O]<sub>2</sub>C<sub>3</sub>F<sub>7</sub>-n, OCF<sub>2</sub>CF(CF<sub>3</sub>)OCF<sub>2</sub>CF<sub>2</sub>SO<sub>2</sub>F, F, O(CF<sub>2</sub>)<sub>5</sub>CO<sub>2</sub>Me, O(CF<sub>2</sub>)<sub>3</sub>OCF(CF<sub>3</sub>)CN] decreased in the stated order of R.

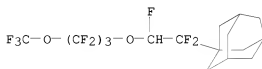
IT 128428-29-5P 128428-30-8P 128428-31-9P  
128428-32-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 128428-29-5 CAPLUS  
CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[1,1,2-trifluoro-2-(heptafluoropropoxy)ethyl]- (9CI) (CA INDEX NAME)



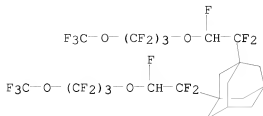
RN 128428-30-8 CAPLUS  
CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1,3-bis[1,1,2-trifluoro-2-(heptafluoropropoxy)ethyl]- (9CI) (CA INDEX NAME)



RN 128428-31-9 CAPLUS  
CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[1,1,2-trifluoro-2-[1,1,2,2,3,3-hexafluoro-3-(trifluoromethoxy)propoxy]ethyl]- (CA INDEX NAME)



RN 128428-32-0 CAPLUS  
CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1,3-bis[1,1,2-trifluoro-2-[1,1,2,2,3,3-hexafluoro-3-(trifluoromethoxy)propoxy]ethyl]- (CA INDEX NAME)



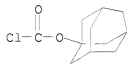
L4 ANSWER 104 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1990:439852 CAPLUS  
 DOCUMENT NUMBER: 113:39852  
 TITLE: Solvolysis-decomposition of 1-adamantyl chloroformate: evidence for ion pair return in 1-adamantyl chloride solvolysis  
 AUTHOR(S): Kevill, Dennis N.; Kyong, Jin Burm; Weitl, Frederick L.  
 CORPORATE SOURCE: Dep. Chem., North. Illinois Univ., DeKalb, IL, 60115, USA  
 SOURCE: Journal of Organic Chemistry (1990), 55(14), 4304-11  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 113:39852

AB In hydroxylic solvents, 1-adamantyl chloroformate reacts with loss of CO<sub>2</sub> and formation of both solvolysis and decomposition products. The rates of both processes are appreciably sensitive to solvent ionizing power, with the solvolysis slightly more so. The influence of anionic additives is discussed. For mixts. of hydroxylic solvents, the selectivities for the formation of solvolysis products are very similar to those observed in conventional solvolyses of 1-adamantyl derivs. It is suggested that 1-Ad+ Cl- ion pair intermediates are formed, and the observation of collapse requires that an identical collapse, corresponding to internal return, also occurs in 1-adamantyl chloride solvolysis. A comparison with solvolyses of similar compds. suggests that the initial ionization is not to 1-Ad+ (OCOCl)- and that the 1-Ad+ Cl- ion pair is formed either in a concerted process or via a very unstable (1-AdOCO)+ Cl- ion pair.

IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (solvolysis-decomposition of, in hydroxylic solvents, mechanism and kinetics of)

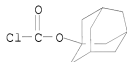
RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 105 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:157506 CAPLUS  
 DOCUMENT NUMBER: 112:157506  
 TITLE: Correlation of the rates of decomposition and solvolysis-decomposition of 1-adamantyl chloroformate with solvent ET(30) values  
 AUTHOR(S): Kevill, Dennis N.; Weitl, Frederick L.  
 CORPORATE SOURCE: Dep. Chem., North. Illinois Univ., DeKalb, IL, 60115, USA  
 SOURCE: Journal of Chemical Research, Synopses (1989), (10), 318-19  
 CODEN: JRPSDC; ISSN: 0308-2342  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The title correlation was established on dioxane (decomposition) and MeCN (solvolysis-decomposition).  
 IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: PRP (Properties)  
 (decomposition and solvolysis of, solvent Dimroth-Reichardt values in relation to kinetics of)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 106 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1990:157322 CAPLUS  
 DOCUMENT NUMBER: 112:157322  
 TITLE: A simple conversion of 1-chloroethyl carbonates to fluoroformates: value in the preparation of tertiary alkyl fluoroformates  
 AUTHOR(S): Dang Vu Anh; Olofson, Roy A.; Wolf, Patrick R.; Piteau, Marc D.; Senet, Jean Pierre G.  
 CORPORATE SOURCE: Dep. Chem., Pennsylvania State Univ., University Park, PA, 16802, USA  
 SOURCE: Journal of Organic Chemistry (1990), 55(6), 1847-51  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 112:157322  
 AB When the economical and easily available 1-chloroalkyl carbonates RCHClOCO2R1 (R = Me, CC13; R1 = alkyl aralkyl, Ph) are heated neat or in solution with KF in the presence of an 18-crown-6 catalyst, they fragment to aldehydes RCHO and fluoroformates FCO2R1. If the system is evacuated during reaction and either or both products are removed as formed then the process is driven to completion and fluoroformates are isolated in good yield. The new methodol., which exemplifies an unusual conversion of an ester to an acid halide, is especially valuable in the synthesis of important tertiary alkyl and benzyl fluoroformates FCO2R1 (I, R1 = CMe3, CMe2Et, 1-adamantyl, PhCH2) from MeCHClOCO2R1. I (R1 = CMe3) (Boc-F) previously has been recommended as a superior reagent for the preparation of Boc-amino



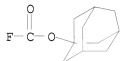
acids, but earlier routes to this reagent have been expensive and impractical. When R = CCl<sub>3</sub>, the reaction proceeds cleanly without the 18-crown-6 catalyst. This latter variation is most useful on a small industrial scale.

IT 62087-82-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 107 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:139656 CAPLUS

DOCUMENT NUMBER: 112:139656

TITLE: Advantages of fluoroformates as carboalkoxylating reagents for polar reactants

AUTHOR(S): Dang Vu Anh; Olofson, Roy A.

CORPORATE SOURCE: Dep. Chem., Pennsylvania State Univ., University Park, PA, 16802, USA

SOURCE: Journal of Organic Chemistry (1990), 55(6), 1851-4

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 112:139656

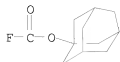
AB While chloroformates react explosively with DMSO and exothermically with DMF and other tertiary amides, it was found that fluoroformates are stable in these solvents below 100 °. Several important classes of hydroxyl- and amine-containing organic compds. are insol. in aprotic solvents less polar than DMSO and DMF and thus cannot be carboalkoxylated in inert media with chloroformates. In this paper, such compds. were easily and efficiently carboalkoxylated with fluoroformates in DMSO or DMF (N-methylpyrrolidinone). Examples include the per-carboalkoxylation of glucose, salicin, adonitol, sucrose, and thymidine in 77-89% yield. KF, or preferably Et<sub>3</sub>N, is used as the proton scavenger. While cellulose is only partly carboalkoxylated under these conditions, essentially all of the OH functions in polyvinyl alc. of average MW 12000 are converted to carboxy groups.

IT 62087-82-5

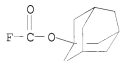
RL: RCT (Reactant); RACT (Reactant or reagent)  
(alkoxycarbonylation by, of glucose)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 108 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1990:98001 CAPLUS  
 DOCUMENT NUMBER: 112:98001  
 TITLE: Simple one-step preparations of vinylic carbonates from aldehydes  
 AUTHOR(S): Olofson, R. A.; Dang Vu Anh; Morrison, David S.; De Cusati, Paul F.  
 CORPORATE SOURCE: Dep. Chem., Pennsylvania State Univ., University Park, PA, 16802, USA  
 SOURCE: Journal of Organic Chemistry (1990), 55(1), 1-3  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 112:98001  
 AB Treatment of enolizable aldehydes RCHR1CHR (I, R, R1 = H Me) with fluoroformates FCO2R2 (R2 = CH2CMe, Et, etc.) and KF in DMSO at 55-100° for 8-24 h affords 1-alkenyl carbonates RCR1:CHO2COR2 (II) in 71-92% yield. In this process, naked fluoride abstrs. a proton from I to generate an enolate, which rapidly is acylated at oxygen by FCO2R1 to give II. The HF thus generated is scavenged by more KF and nicely eliminated as KHF2. The reaction also is unusual because complications from the generally dominant acceptor properties of aldehydes are not observed. Simple ketones react very slowly if at all in this reaction. However, the acidic phenylacetone reacts almost as fast as acetaldehyde, an indication that aldehydes may be more acidic than previously recognized. The transformation I → II also can be performed in acetonitrile if 18-crown-6 is included as a catalyst. In this system, chloroformates may be substituted for fluoroformates if an extra equivalent of KF is included in the reaction medium. The yields are as good and the conditions are milder, but 1-fluoroalkyl carbonates can be significant side products (especially in reactions done without solvent).  
 IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (acylation by, of aldehyde enolate, vinylic carbonates by)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)

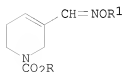


L4 ANSWER 109 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1989:477858 CAPLUS

DOCUMENT NUMBER: 111:77858  
 TITLE: 1,2,5,6-Tetrahydropyridine-3-carboxaldehyde oxime derivatives, process for their preparation, and cholinomimetic formulations containing them  
 INVENTOR(S): Galliani, Giulio; Barzaghi, Fernando; Bonetti, Carla; Toja, Emilio  
 PATENT ASSIGNEE(S): Roussel-UCLAF, Fr.  
 SOURCE: Eur. Pat. Appl., 18 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 308283	A1	19890322	EP 1988-402128	19880819
EP 308283	B1	19920122		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
NO 8803521	A	19890222	NO 1988-3521	19880808
NO 174504	B	19940207		
NO 174504	C	19940518		
DK 8804573	A	19890222	DK 1988-4573	19880816
JP 01068356	A	19890314	JP 1988-203962	19880818
JP 07107048	B	19951115		
ZA 8806131	A	19891025	ZA 1988-6131	19880818
FI 8803869	A	19890222	FI 1988-3869	19880819
FI 90070	B	19930915		
FI 90070	C	19931227		
AU 8821100	A	19890223	AU 1988-21100	19880819
AU 608643	B2	19910411		
HU 49328	A2	19890928	HU 1988-4414	19880819
HU 201012	B	19900928		
SU 1681723	A3	19910930	SU 1988-4356622	19880819
AT 71938	T	19920215	AT 1988-402128	19880819
ES 2038776	T3	19930801	ES 1988-402128	19880819
CA 1340987	C	20000509	CA 1988-575166	19880819
US 4921868	A	19900501	US 1988-234632	19880822
US 5231107	A	19930727	US 1992-863466	19920401
PRIORITY APPLN. INFO.:			IT 1987-21687	A 19870821
			EP 1988-402128	A 19880819
			US 1988-234632	A3 19880822
			US 1990-501889	B2 19900330
			US 1990-560849	B1 19900731

OTHER SOURCE(S): MARPAT 111:77858  
 GI



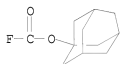
I

AB The title compds. I [R = (substituted) (un)saturated alkyl, (substituted) aryl, aralkyl; R1 = H, (un)saturated alkyl], useful as cholinomimetics, were prepared. A mixture of 1,2,5,6-tetrahydropyridine-3-carboxaldehyde O-Me oxime, Et3N, and ClCO2Et in benzene was stirred at room temperature for 1 h to give 1-ethoxycarbonyl-1,2,5,6-tetrahydropyridine-3-carboxaldehyde O-Me oxime (II). In an in vitro test using guinea pig ileum for cholinergic activity, II exhibited a pD2 of 4.47, vs. 6.48 for arecoline. Capsules containing 1-(p-chlorophenylloxycarbonyl)-1,2,5,6-tetrahydropyridine-3-carboxaldehyde O-Me oxime 60 mg and excipient (lactose, starch, Mg stearate, talc) 300 mg were prepared.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in preparation of cholinomimetic)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 110 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1989:115485 CAPLUS  
 DOCUMENT NUMBER: 110:115485  
 TITLE: Preparation of 1-alkenyl carbonates for use in polymer formation  
 INVENTOR(S): Vu Anh Dang; Olofson, Roy; Morrison, David; Decusati, Paul  
 PATENT ASSIGNEE(S): Societe Nationale des Poudres et Explosifs, Fr.  
 SOURCE: Fr. Demande, 29 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

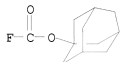
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2603886	A1	19880318	FR 1986-12745	19860912
FR 2603886	B1	19881216		

PRIORITY APPLN. INFO.: FR 1986-12745 19860912  
 OTHER SOURCE(S): CASREACT 110:115485; MARPAT 110:115485

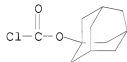
AB Carbonates (R1CR2:CR3OCO2)nR4 (R1, R2 = H, halo, alkyl, etc.; R1R2, R2R3 = ring-completing group; R3 = H, alkyl, aryl, etc.; R4 = aliphatic group, etc.; n = 1-2) are prepared from fluoroformates (FCO2)nR4 and carbonyl compds. R1CHR2COR3 in the presence of KF, CsF, KHF2, or KSO2F, optionally activated by cryptates or cyclic polyesters, at 20-100°. Stirring AcH 4.73, FCO2Et 1.95, KF 5.00, 18-crown-6 1.00, and PhNO2 4.30 g 5 h at 55° gave 1.95 g H2C:CHOCO2Et.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (esterification of, with carbonyl compound)

RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

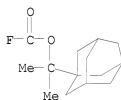


L4 ANSWER 111 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1989:7447 CAPLUS  
 DOCUMENT NUMBER: 110:7447  
 TITLE: Kinetics and mechanism of monomolecular heterolysis of cage compounds. V. Ionization-fragmentation process in the decomposition of 1-adamantyl chloroformate  
 AUTHOR(S): Ponomareva, E. A.; Yavorskaya, I. F.; Dvorko, G. F.  
 CORPORATE SOURCE: Kiev. Politekh. Inst., Kiev, USSR  
 SOURCE: Zhurnal Organicheskoi Khimii (1988), 24(3), 535-49  
 CODEN: ZORKAE; ISSN: 0514-7492  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 OTHER SOURCE(S): CASREACT 110:7447  
 AB The decomposition of 1-adamantyl chloroformate was examined in the presence of triphenylverdazyls in MeCN, PhNO<sub>2</sub>, benzene, Me<sub>2</sub>CHOH, and Me<sub>3</sub>COH. In PhNO<sub>2</sub>, small amts. of H<sub>2</sub>O increased the rate, and addition of tetraethylammonium halides decreased it. In the alc. solvents and in PhNO<sub>2</sub> in the presence of tetraethylammonium halides, the rate depended on the substituent in the verdazyl. The rate increased linearly with solvent dielec. constant. In the 1st step a contact ion pair is formed, which in the rate-determining step either fragments to 1-adamantyl chloride (I) or is transformed to a solvent-separated ion pair. The latter reacts with the verdazyl or fragments to I.  
 IT 5854-52-4, 1-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (decomposition of, in presence of triarylvertazyls, kinetics of)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 112 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1988:167919 CAPLUS  
 DOCUMENT NUMBER: 108:167919  
 TITLE: The interaction of copper(II) ions with the thyrotropin-releasing hormone synthesized by Adpoc protection  
 AUTHOR(S): Maskos, Karol; Kalbacher, Hubert; Stock, Wieland;

Voelter, Wolfgang  
 CORPORATE SOURCE: Physiol.-Chem. Inst., Univ. Tuebingen, Tuebingen, D-7400, Fed. Rep. Ger.  
 SOURCE: Zeitschrift fuer Naturforschung, B: Chemical Sciences (1987), 42(4), 459-66  
 CODEN: ZNBSEN; ISSN: 0932-0776  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The copper(II) complexes of the TSH-releasing hormone (L-pyroglutamyl-L-histidyl-L-prolinamide, TRH) in aqueous 3M LiCl solns. were investigated as a function of pH by CD, absorption, ESR spectroscopy. A simple ML (1N) complex of copper (II)-TRH is formed over the pH range 4.0-4.5, while 2N and 3N complexes are present in solns. of pH of 4.4-6.0. From pH 6.1 to 9.8, a ML2 (4N) complex is formed and this species is the only complex found over the pH range 6.5-8.5. At pH values above 9.0, a 3N species is formed in addition to a 2N complex which is present in the solns. of pH 11.3. These observations are controversial with respect to former reports. TRH was synthesized using the fully Adpoc (adamantylisopropylloxycarbonyl)-protected histidine. The advantages of the Adpoc group (cleavable under extreme mild acidolytic conditions) become obvious.  
 IT 74654-74-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (protection by, of histidine)  
 RN 74654-74-3 CAPLUS  
 CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)



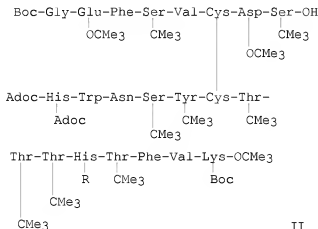
L4 ANSWER 113 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1988:132279 CAPLUS  
 DOCUMENT NUMBER: 108:132279  
 TITLE: Synthesis of the trypsin fragment 10-25/75-88 of mouse nerve growth factor. II. The unsymmetrical double chain cystine peptide  
 AUTHOR(S): Romani, S.; Moroder, L.; Goehring, W.; Scharf, R.; Wuensch, E.; Barde, Y. A.; Thoenen, H.  
 CORPORATE SOURCE: Pept. Chem. Dep., Max Planck Inst. Biochem., Martinsried, D-8033, Fed. Rep. Ger.  
 SOURCE: International Journal of Peptide & Protein Research (1987), 29(1), 107-17  
 CODEN: IJPPC3; ISSN: 0367-8377  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 108:132279  
 GI

H-Gly-Glu-Phe-Ser-Val-Cys-Asp-Ser-Val-R<sup>1</sup>

H-His-Trp-Asn-Ser-Tyr-Cys-Thr-Thr-Thr-R<sup>2</sup>

I, R<sup>1</sup>=Ser-Val-Trp-Val-Gly-Asp-Lys-OH

R<sup>2</sup>=His-Thr-Phe-Val-Lys-OH



AB The title peptide I was prepared by coupling cystine peptide II (Boc = Me<sub>3</sub>CO<sub>2</sub>C, Adoc = adamantyloxycarbonyl, R = Adoc) (III) with H-Val-Ser(CMe<sub>3</sub>)-Val-Trp-Val-Gly-Asp(OCMe<sub>3</sub>)-Lys(Boc)-OCMe<sub>3</sub> (IV) by the mixed anhydride method and deblocking the resulting protected peptide by acidolysis. Boc-Gly-Glu(OCMe<sub>3</sub>)-Phe-Ser(CMe<sub>3</sub>)-Val-Cys(R<sup>1</sup>)-Asp(OCMe<sub>3</sub>)-Ser(CMe<sub>3</sub>)-OH (V) (R<sup>1</sup> = SCMe<sub>3</sub>) (VI) was cleaved with Bu<sub>3</sub>F to give V (R<sup>1</sup> = H), which was treated with BocN:NBoc to give V [R<sup>1</sup> = N(Boc):NBoc]. The latter underwent disulfide coupling with Adoc-His(Adoc)-Trp-Asn-Ser(CMe<sub>3</sub>)-Tyr(CMe<sub>3</sub>)-Cys-Thr(CMe<sub>3</sub>)-Thr(CMe<sub>3</sub>)-His-Thr(CMe<sub>3</sub>)-Phe-Val-Lys(Boc)-OCMe<sub>3</sub> to give II (R = H), which was treated with Adoc-F to give III. IV and VI were prepared by solution methods. I was inactive in all bioassays; consequently, this portion of the NGF mol. does not represent or contain a lower mol. weight form of the neurotrophic factor.

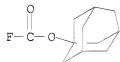
IT 62087-82-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(Nim-adamantyloxycarbonylation by, of histidine-containing peptide)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

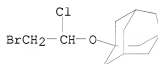


L4 ANSWER 114 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:111768 CAPLUS

DOCUMENT NUMBER: 108:111768

TITLE: Efficient synthesis of tert-alkoxyethynes  
 AUTHOR(S): Pericas, Miquel A.; Serratos, Felix; Valenti, Eduard  
 CORPORATE SOURCE: Dep. Quim. Org., Univ. Barcelona, Barcelona, 08028, Spain  
 SOURCE: Tetrahedron (1987), 43(10), 2311-16  
 CODEN: TETRAB; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 108:111768  
 AB Bromoalkoxylation of EtOCH:CH2 with Br and ROH (R = Me3C, 1-adamantyl) gave BrCH2CH(OR)OEt (I). Chlorodeethoxylation of I with PC15, followed by dehydrochlorination, gave (Z)-ROCH:CHBr (II) in 72-76% yields. Dehydrobromination of II with NaNH2 gave ROC.tplbond.CH in 59-75% yields. Dehydrobromination of II (R = Me3C) with LiN(CHMe2)2, followed by alkylation with BuBr, gave Me3COC.tplbond.CBu in 47-55% yield.  
 IT 113279-38-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and dehydrochlorination of, with triethylamine)  
 RN 113279-38-2 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-(2-bromo-1-chloroethoxy)- (CA INDEX NAME)

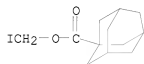


L4 ANSWER 115 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1987:637255 CAPLUS  
 DOCUMENT NUMBER: 107:237255  
 TITLE: Synthesis of substrates of cyclic AMP-dependent protein kinase and use of their protected precursors for the convenient preparation of phosphoserine peptides  
 AUTHOR(S): Grehn, Leif; Fransson, Bengt; Ragnarsson, Ulf  
 CORPORATE SOURCE: Inst. Biochem., Univ. Uppsala, Uppsala, S-751 23, Swed.  
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1987), (3), 529-35  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 107:237255  
 AB The synthesis of protected hexa- to nona-peptide precursors of substrates of cAMP-dependent protein kinase, based on a partial amino acid sequence from rat liver pyruvate kinase, as well as of related phosphoserine peptides has been explored. A convenient scheme has been developed which furnishes both N-terminally elongated peptides of variable lengths and intermediates suitable for chemical phosphorylation. The use of adamantyloxycarbonyl as a protecting group for the two important guanidine functions involved, gave rise to the highly lipophilic intermediates HF or CF3CO2H afforded the pure substrate peptides R-Arg-Arg-Ala-Ser-Val-Ala-OH





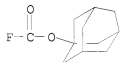
RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with cephalosporin derivative)  
 RN 106518-37-0 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid, iodomethyl ester (CA INDEX NAME)



L4 ANSWER 117 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1987:4532 CAPLUS  
 DOCUMENT NUMBER: 106:4532  
 TITLE: Fluoroformates  
 INVENTOR(S): Piteau, Marc; Senet, Jean Pierre; Wolf, Patrick; Vu Anh Dang; Olofson, Roy A.  
 PATENT ASSIGNEE(S): Societe Nationale des Poudres et Explosifs, Fr.  
 SOURCE: Fr. Demande, 19 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2571049	A1	19860404	FR 1984-14971	19840928
FR 2571049	B1	19871023		

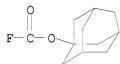
PRIORITY APPLN. INFO.: FR 1984-14971 19840928  
 OTHER SOURCE(S): CASREACT 106:4532; MARPAT 106:4532  
 AB R102CF [R1 = (un)substituted, (un)saturated aliphatic, cycloaliph., polycyclyl] were prepared by fluoride treatment of carbonates at 20-120°. Thus, Me3COH was condensed with ClCO2CHC1CC13 to give Me3CO2COCHC1CC13. This was fluorinated with KF.18-crown-6 complex at 30-35° to give 79% (Me3C)O2CF.  
 IT 62087-82-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 118 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1986:571854 CAPLUS

DOCUMENT NUMBER: 105:171854  
 ORIGINAL REFERENCE NO.: 105:27681a, 27684a  
 TITLE: Fluoroformate esters  
 INVENTOR(S): Piteau, Marc; Senet, Jean Pierre; Wolf, Patrick; Dang, Vu Anh; Olofson, Roy Arne  
 PATENT ASSIGNEE(S): Societe Nationale des Poudres et Explosifs, Fr.  
 SOURCE: Eur. Pat. Appl., 20 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

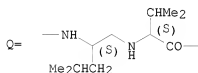
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 176412	A1	19860402	EP 1985-401723	19850905
EP 176412	B1	19881117		
R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
US 4612143	A	19860916	US 1984-651661	19840917
IL 76249	A	19881230	IL 1985-76249	19850829
JP 61112048	A	19860530	JP 1985-201963	19850913
JP 06043368	B	19940608		
HU 38602	A2	19860630	HU 1985-3483	19850916
HU 199101	B	19900129		
PRIORITY APPLN. INFO.:		US 1984-651661	A	19840917
OTHER SOURCE(S):		CASREACT 105:171854; MARPAT 105:171854		
AB The reaction of R2CHCIOC(O)OR1 (R1 = saturated or unsatd. hydrocarbonyl; R2 = H, alkyl, cycloalkyl, etc.) with alkali, alkaline earth, ammonium, and quaternary ammonium fluorides gave FCO2R1. Thus, Cl3CCHCIOC(O)OCMe3 was treated with KF and 18-crown-6 in MeO(CH2CH2O)2Me to give FCO2CMe3.				
IT 62087-82-5P				
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)				
RN 62087-82-5 CAPLUS				
CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)				



L4 ANSWER 119 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1986:406824 CAPLUS  
 DOCUMENT NUMBER: 105:6824  
 ORIGINAL REFERENCE NO.: 105:1277a, 1280a  
 TITLE: Antihypertensive peptides containing ethylenediamine moiety  
 INVENTOR(S): Rasetti, Vittorio; Buhlmyer, Peter; Fuhrer, Walter; Andreatta, Rudolf Heinrich; Caselli, Anthony; Renner, Ulrich  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
 SOURCE: Eur. Pat. Appl., 147 pp.  
 CODEN: EPXXDW

DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 144290	A2	19850612	EP 1984-810575	19841126
EP 144290	A3	19870527		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
DK 8405714	A	19850602	DK 1984-5714	19841130
AU 8436094	A	19850606	AU 1984-36094	19841130
ES 538172	A1	19861116	ES 1984-538172	19841130
JP 60136595	A	19850720	JP 1984-252849	19841201
PRIORITY APPLN. INFO.:			CH 1983-6436	A 19831201
GI				

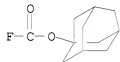


AB Antihypertensive (no data) R1-X1-X2-NR2CHR3CH2NR4CHR5COR6 [I, R1 = H, acyl; R2 = H, alkyl; R3, R5 = H, (substituted) alkyl, (substituted) aryl; R4 = H, alkyl, acyl; R6 = substituted amino, substituted hydroxy; X1, X2 = amino acid residue] and their salts were prepared. Thus, a mixture of 218 mg Z-Phe-His-OH, 207 mg H-Q-NH(CH<sub>2</sub>)<sub>7</sub>CO<sub>2</sub>CMe<sub>3</sub>, 77 mg 1-hydroxybenzotriazole, and 8 mL DMF was cooled at 0°, 134 mg dicyclohexylcarbodiimide added, the resulting mixture cooled at 0° for 1 h and then maintained at room temperature for 2 h to give Z-Phe-His-Q-NH(CH<sub>2</sub>)<sub>7</sub>CO<sub>2</sub>CMe<sub>3</sub> (yield not given).

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (N-blocking by, of phenylalanine)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 120 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1986:406783 CAPLUS  
 DOCUMENT NUMBER: 105:6783  
 ORIGINAL REFERENCE NO.: 105:1269a,1272a  
 TITLE: Improved method for the synthesis of  
 Nα-9-fluorenylmethyloxycarbonyl-Nδ,ω-  
 bis-adamantyloxycarbonyl-L-arginine

AUTHOR(S): Presentini, R.; Antoni, G.  
 CORPORATE SOURCE: Res. Cent., Sclavo S.p.A., Siena, Italy  
 SOURCE: International Journal of Peptide & Protein Research  
 (1986), 27(2), 123-6  
 CODEN: IJPPC3; ISSN: 0367-8377

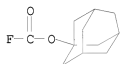
DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 105:6783

AB Fmoc-Arg(Adoc)2-OH (I; Fmoc = 9-fluorenylmethyloxycarbonyl, Adoc = adamantyloxycarbonyl) was prepared from Z-Arg-OH (II, Z = PhCH2O2C) in 3 steps. Thus, II was treated with Adoc-F to give 86% Z-Arg(Adoc)2-OH, which was Z-deblocked by catalytic transfer hydrogenation to give 82% H-Arg(Adoc)2-OH. The latter was treated with Fmoc-ONSu (NSu = succinimido) to give 93% I.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (adamantyloxycarbonylation by, of arginine derivative)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 121 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:168818 CAPLUS  
 DOCUMENT NUMBER: 104:168818  
 ORIGINAL REFERENCE NO.: 104:26763a,26766a

TITLE: Macromolecular analogs of the copper(II) binding site of human serum albumin. 3. Synthesis, conformation, and ion binding properties of glycylglycyl- $\alpha,\gamma$ -diaminobutyric acid derivatives of poly(L-lysine)

AUTHOR(S): Foffani, M. T.; Cestaro, M.; Pezzoli, A.; Peggion, E.  
 CORPORATE SOURCE: Biopolym. Res. Cent., Univ. Padua, Padua, 35131, Italy  
 SOURCE: Macromolecules (1986), 19(4), 945-52  
 CODEN: MAMOBX; ISSN: 0024-9297

DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 104:168818

AB Title poly(L-lysine) derivs. were prepared by condensing Boc-Gly-Gly-Dab-ONSu (Boc = Me3CO2C, Dab =  $\alpha,\gamma$ -diaminobutyric acid residue, NSu = succinimido) with the  $\epsilon$ -amino groups of poly(L-lysine) and Boc-deblocking the resulting products. Polymeric adducts were prepared with 50% and 100% side-chain modification. The conformational and Cu(II) or Ni(II) binding properties of the derivatized polymers were investigated by absorption and CD techniques. In aqueous solution at pH  $\geq$  12 the 50% modified polymer folds into the right-handed  $\alpha$ -helical conformation, whereas the 100% modified polymer remains in a random structure. Both polymers interact strongly with Cu(II) and Ni(II) ions; in aqueous solution at neutral pH complexes are formed in which each

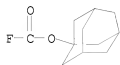
tripeptide chelating unit binds 1 metal ion. The results are compatible with a structure in which the Gly terminal amino group and the 3 consecutive deprotonated peptide nitrogens of the side chain are coordinated to the metal ion. Complex formation causes folding of the main chain into the right-handed,  $\alpha$ -helical conformation even in the case of the 100% modified polymer.

IT 62087-82-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(adamantylloxycarbonylation by, of diaminobutyric acid)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

L4 ANSWER 122 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:129710 CAPLUS

DOCUMENT NUMBER: 104:129710

ORIGINAL REFERENCE NO.: 104:20517a,20520a

TITLE: Esters of cephalosporin derivatives

INVENTOR(S): Curran, William Vincent; Schneller, Ross Adma

PATENT ASSIGNEE(S): American Cyanamid Co., USA

SOURCE: Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

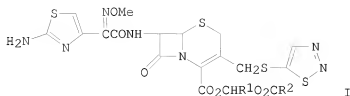
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

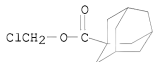
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 157000	A2	19851009	EP 1984-116013	19841220
EP 157000	A3	19861022		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
US 4914091	A	19900403	US 1984-595844	19840402
JP 60209589	A	19851022	JP 1984-200689	19840927
DK 8406269	A	19851003	DK 1984-6269	19841221
AU 8437021	A	19851010	AU 1984-37021	19841221
AU 571042	B2	19880331		
ES 539367	A1	19860516	ES 1985-539367	19850104
ZA 8500240	A	19850925	ZA 1985-240	19850110
HU 37436	A2	19851228	HU 1985-78	19850110
HU 194252	B	19880128		
FI 8501306	A	19851003	FI 1985-1306	19850401
NO 8501336	A	19851003	NO 1985-1336	19850401
ES 549294	A1	19860501	ES 1985-549294	19851126
PRIORITY APPLN. INFO.:			US 1984-595844	A 19840402
OTHER SOURCE(S):	CASREACT 104:129710			

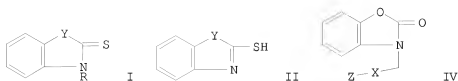
GI



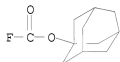
- AB The title compds. I (R1 = H, C1-6 alkyl; R2 = C1-6 alkyl, aryl, adamantyl, OR3, R3 = C1-6 alkyl, etc.) useful as oral prodrugs were prepared. Thus, 7β-[2-(2-aminothiazol-4-yl)-(Z)-2-methoxyiminoacetamido]-3-[(1,2,3-thiadiazol-5-yl)thiomethyl]ceph-3-em-4-carboxylic acid was reacted with ClCH2O2CCMe3 and KI in Me2CO and DMF followed by addition of Et3N to give I (R1 = H, R2 = CMe3) (II). The ED50 of II in *Escherichia coli*-infected mice was 2 mg/kg compared with 7.2 and 16 for the free acid and Cefaclor, resp.
- IT 71570-32-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(alkylation by, of sodium cephalosporin)
- RN 71570-32-6 CAPLUS
- CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid, chloromethyl ester (CA INDEX NAME)



L4 ANSWER 123 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1986:110147 CAPLUS  
 DOCUMENT NUMBER: 104:110147  
 ORIGINAL REFERENCE NO.: 104:17477a,17480a  
 TITLE: On the use of five-membered heterocycles in peptide chemistry  
 AUTHOR(S): Romani, S.; Moroder, L.; Bovermann, G.; Wuensch, E.  
 CORPORATE SOURCE: Abt. Peptidchem., Max-Planck-Inst. Biochem., Martinsried, D-8033, Fed. Rep. Ger.  
 SOURCE: Synthesis (1985), (8), 738-42  
 CODEN: SYNIBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 104:110147  
 GI



- AB N-Acyl heterocycles I [Y = O, S, NH, R = PhCH<sub>2</sub>O<sub>2</sub>C (Z); Y = O, S, R = 9-fluorenylmethoxycarbonyl (Fmoc)] were prepared by treating thiols II (Y = same) with RCl. I are efficient acylating agents for the synthesis of N-Z and N-Fmoc amino acid derivs. I [Y = O, R = adamantyloxycarbonyl (Adoc)] (III) was prepared similarly. III was an efficient Adoc donor, but it was not practical for the synthesis of N-Adoc amino acid derivs. due to solubility problems. Benzoxazoline-2-thione derivs. IV (X = Val, Trp, Phe, Gly) were prepared by condensing II (Y = O) with Z-X-OH by DCC. IV can be used as activated amino acids in peptide synthesis.
- IT 62087-82-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(N-acylation by, of benzoxazolethiol)
- RN 62087-82-5 CAPLUS
- CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



- L4 ANSWER 124 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN
- ACCESSION NUMBER: 1985:523898 CAPLUS
- DOCUMENT NUMBER: 103:123898
- ORIGINAL REFERENCE NO.: 103:19837a,19840a
- TITLE: Synthesis of the hypothetical active site of the nerve growth factor
- AUTHOR(S): Wuensch, Erich
- CORPORATE SOURCE: Abt. Peptidchem., Max-Planck-Inst. Biochem., Martinsried, D-8033, Fed. Rep. Ger.
- SOURCE: Monatshefte fuer Chemie (1985), 116(4), 505-24  
CODEN: MOCMB7; ISSN: 0026-9247
- DOCUMENT TYPE: Journal
- LANGUAGE: German
- OTHER SOURCE(S): CASREACT 103:123898
- GI For diagram(s), see printed CA Issue.
- AB Unsym. cystine peptide I corresponding to the 10-25/75-88 sequence of mouse nerve growth factor was prepared using a sulfenohydrazide procedure for the disulfide coupling of 2 cysteine peptides. Thus, Boc-Gly-Glu(OCMe<sub>3</sub>)-Phe-Ser(CMe<sub>3</sub>)-Val-Cys(R)-Asp(OCMe<sub>3</sub>)-Ser(CMe<sub>3</sub>)-OH (II; Boc = Me<sub>3</sub>CO<sub>2</sub>C, R = SCMe<sub>3</sub>) was cleaved at the cysteine residue by Bu<sub>3</sub>P to give II (R = H), which was treated with BocN:Boc to give sulfenohydrazide derivative II (R = NBocNHBoc), which underwent disulfide coupling with Adoc-His(Adoc)-Trp-Asn-Ser(CMe<sub>3</sub>)-Tyr(CMe<sub>3</sub>)-Cys-Thr(CMe<sub>3</sub>)-Thr(CMe<sub>3</sub>)-



Thr(CMe3)-His-Thr(CMe3)-Phe-Val-Lys(Boc)-OCMe3 (Adoc = adamantyloxycarbonyl) to give the corresponding protected 10-17/75-88 unsym. cystine peptide. The latter was eventually coupled with H-Val-Ser(CMe3)-Val-Trp-Val-Gly-Asp(OCMe3)-Lys(Boc)-OCMe3 to give protected I, which was deblocked by CF3CO2H to give I. Another method for the preparation of I was discussed in which the unprotected 10-25 and 75-88 chains were coupled by the sulfenohydrazide method. All peptide fragments and chains needed in the 2 methods were prepared by conventional solution methods. I did not exhibit nerve growth factor activity.

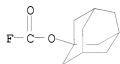
IT 62087-82-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(adamantyloxycarbonylation by, of histidine-containing peptide)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 125 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1985:422197 CAPLUS

DOCUMENT NUMBER: 103:22197

ORIGINAL REFERENCE NO.: 103:3651a,3654a

TITLE: Adamantane-type carbamates

AUTHOR(S): Novikova, M. I.; Kozlov, O. F.

CORPORATE SOURCE: USSR

SOURCE: Vestn. Kiev. Politekhn. In-ta. Khim. Mashinostr. i

Tekhnol. (1984), (21), 6-9

From: Ref. Zh., Khim. 1985, Abstr. No. 2Zh144

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 103:22197

AB Title only translated.

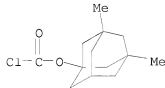
IT 10144-56-6P 10144-78-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with amines, carbamates by)

RN 10144-56-6 CAPLUS

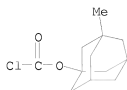
CN Carbonochloridic acid, 3,5-dimethyltricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



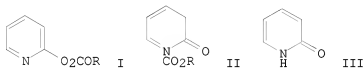
RN 10144-78-2 CAPLUS

CN Carbonochloridic acid, 3-methyltricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA

INDEX NAME)

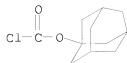


L4 ANSWER 126 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1985:204268 CAPLUS  
 DOCUMENT NUMBER: 102:204268  
 ORIGINAL REFERENCE NO.: 102:32033a, 32036a  
 TITLE: 2(1H)-Pyridone as leaving group in acylation reactions  
 - applications in peptide chemistry  
 AUTHOR(S): Effenberger, Franz; Brodt, Werner  
 CORPORATE SOURCE: Inst. Org. Chem., Univ. Stuttgart, Stuttgart,  
 D-7000/80, Fed. Rep. Ger.  
 SOURCE: Chemische Berichte (1985), 118(2), 468-82  
 CODEN: CHBEAM; ISSN: 0009-2940  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 OTHER SOURCE(S): CASREACT 102:204268  
 GI

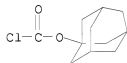


AB Pyridyl carbonates I (R = CH<sub>2</sub>Ph, 1-adamantyl) and mixts. of I [R = CMe<sub>3</sub>, 1-(1-adamantyl)-1-ethylmethyl] and their corresponding isomers II were prepared as reagents for the introduction of urethane protective groups into amino acids. Thus, the above I and I/II mixts. were treated with amino acids to give the corresponding N-protected amino acids. N-Protected amino acids were condensed with 2(1H)-pyridone (III) by DCC to give the corresponding 2-pyridyl active esters, which were coupled with amino acid esters with elimination of III to give the corresponding N-protected peptides in good yields and high optical purities.

IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (O-acylation by, of pyridone)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

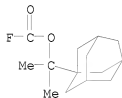


L4 ANSWER 127 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1985:167153 CAPLUS  
 DOCUMENT NUMBER: 102:167153  
 ORIGINAL REFERENCE NO.: 102:26301a,26304a  
 TITLE: Immunodominant regions of transplatation antigens: synthesis and antigenicity of a determinant in the first domain of H-2K molecule  
 AUTHOR(S): Singh, Bhagirath; Fraga, Ester; Widtman, Jana; Fraga, Serafin  
 CORPORATE SOURCE: Dep. Immunol. Chem., Univ. Alberta, Edmonton, AB, T6G 2H7, Can.  
 SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1984), 23B(12), 1237-42  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The 61-69 fragment of H-2K mol., H-Glu-Arg-Glu-Thr-Gln-Lys-Ala-Lys-Gly-OH, is predicted to be a major immunodominant determinant by theor. considerations. This nonapeptide has been synthesized by liquid phase peptide synthesis. The synthetic (61-69) H-2K peptide, when cross-linked to a carrier protein, induced antibodies which bind to the native H-2K mol. on the cell surface as assessed by radioimmunoassay. Such antibodies can only be raised in allogenic but not in syngenic strains of mice. Implications of this observation are discussed.  
 IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (acylation by, of protective arginine)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 128 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1984:611692 CAPLUS  
 DOCUMENT NUMBER: 101:211692  
 ORIGINAL REFERENCE NO.: 101:32099a  
 TITLE: Recently developed amino protecting groups  
 AUTHOR(S): Voelter, Wolfgang; Kalbacher, Hubert; Beni, Charles; Heinzl, Wolfgang; Mueller, Juergen  
 CORPORATE SOURCE: Physiol. Inst., Univ. Tuebingen, Tuebingen, D-7400,

SOURCE: Fed. Rep. Ger.  
 Chem. Pept. Proteins, Proc. USSR-FRG Symp., 4th (1984)  
 , Meeting Date 1982, 103-14. Editor(s): Voelter,  
 Wolfgang. de Gruyter: Berlin, Fed. Rep. Ger.  
 CODEN: 52BGAY  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 AB Cleavage rates are tabulated for amino acids and peptides protected by  
 3,5-(Me3C)2C6H3CR2O2C (R = H, Me) or RCMe2O2C (R = PhCH2, 1-adamantyl).  
 IT 74654-74-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, for protection of amino acids)  
 RN 74654-74-3 CAPLUS  
 CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester  
 (CA INDEX NAME)



L4 ANSWER 129 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1984:552339 CAPLUS  
 DOCUMENT NUMBER: 101:152339  
 ORIGINAL REFERENCE NO.: 101:23083a, 23086a  
 TITLE: Substituted carbonic acid esters  
 INVENTOR(S): Kalbacher, Hubert; Voelter, Wolfgang  
 PATENT ASSIGNEE(S): Fed. Rep. Ger.  
 SOURCE: U.S., 9 pp. Cont. of U.S. Ser. No. 71,668, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

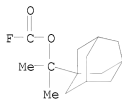
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4440692	A	19840403	US 1982-372798	19820428
PRIORITY APPLN. INFO.:			US 1979-71668	A1 19790831
OTHER SOURCE(S):	CASREACT 101:152339; MARPAT 101:152339			
AB RCR1R2O2CR3 [R = 1-adamantyl (Ad) or substituted Ad; R1, R2 = C1-8 alkyl; R3 = Cl, F, azido, (un)substituted OPh, succinimido, ON:CRCN, O2CCMe2R] were prepared as reagents for the synthesis of protected amino acids and peptides, e.g., AdCMe2O2C (Adpoc) amino acids. Thus, SO3-free FCOC1, obtained from 65% oleum and Cl3CF, was treated with AdCMe2OH in ether containing Et3N at -40° until gas evolution ceased. The resulting mixture was allowed to stand overnight at -20° to give 95% Adpoc-F. Adpoc-F was treated with amino acids to give Adpoc amino acids, e.g., Adpoc-Trp-OH was obtained in 82% yield.				
IT 74654-74-3P	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT			

(Reactant or reagent)

(preparation and reaction of, with amino acid)

RN 74654-74-3 CAPLUS

CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester  
(CA INDEX NAME)



L4 ANSWER 130 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1983:179873 CAPLUS

DOCUMENT NUMBER: 98:179873

ORIGINAL REFERENCE NO.: 98:27363a,27366a

TITLE: Conventional synthesis of thymopoietin 32-36 (TP 5)  
using the acid-labile 1-(1-adamantyl)-1-  
methylethoxycarbonyl group

AUTHOR(S): Heinzl, Wolfgang; Kronbach, Thomas; Voelter, Wolfgang  
CORPORATE SOURCE: Physiol. Chem. Inst., Univ. Tuebingen, Tuebingen,  
D-7400/1, Fed. Rep. Ger.

SOURCE: Zeitschrift fuer Naturforschung, Teil B: Anorganische  
Chemie, Organische Chemie (1982), 37B(12), 1652-8  
CODEN: ZNBAD2; ISSN: 0340-5087

DOCUMENT TYPE: Journal

LANGUAGE: German

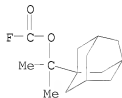
AB The title peptide, H-Arg-Lys-Asp-Val-Tyr-OH, was prepared by stepwise  
couplings in solution using the title group (Adpoc) for the protection of NH2  
groups. The Adpoc group can be cleaved selectively by mild acidolysis (3%  
CF3CO2H in CH2Cl2) in the presence of Me3CO2C and tert-Bu groups.

IT 74654-74-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction of, with valine derivs.)

RN 74654-74-3 CAPLUS

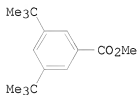
CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester  
(CA INDEX NAME)



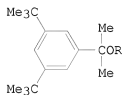
L4 ANSWER 131 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1983:161159 CAPLUS

DOCUMENT NUMBER: 98:161159  
 ORIGINAL REFERENCE NO.: 98:24471a,24474a  
 TITLE: The 1-(3,5-di-tert-butylphenyl)-1-methylethoxycarbonyl (t-Bumeoc) residue, a novel extremely acid-labile amino protecting group for peptide syntheses  
 AUTHOR(S): Voelter, Wolfgang; Mueller, Juergen  
 CORPORATE SOURCE: Physiol.-Chem. Inst., Univ. Tuebingen, Tuebingen, D-7400, Fed. Rep. Ger.  
 SOURCE: Liebigs Annalen der Chemie (1983), (2), 248-60  
 CODEN: LACHDL; ISSN: 0170-2041  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 GI

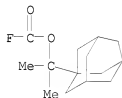


I



II

AB The t-Bumeoc group was used as a protective group for the NH<sub>2</sub> group in peptide synthesis. Benzoate I was treated with MeMgI to give alc. II (R = H), which was treated with ClCOF to give I (R = COF) (t = Bumeoc-F). Amino acids were N-acylated with t-Bumeoc-F to give t-Bumeoc amino acids, which were characterized by <sup>13</sup>C NMR. The t-Bumeoc group was cleaved under very mild acidic conditions; the kinetics of this cleavage was studied. t-Bumeoc-Phe-ONSu (NSu = succinimido) was coupled with D-leucine to give t-Bumeoc-Phe-D-Leu-OH, which was coupled with H-Arg-Phe-NH<sub>2</sub> to give t-Bumeoc-Phe-D-Leu-Arg-Phe-NH<sub>2</sub>.  
 IT 74654-74-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with phenylalanine)  
 RN 74654-74-3 CAPLUS  
 CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)



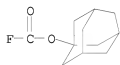
L4 ANSWER 132 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1983:54416 CAPLUS  
 DOCUMENT NUMBER: 98:54416

ORIGINAL REFERENCE NO.: 98:8397a,8400a  
 TITLE: Determination of NIm- $\tau$  and NIm- $\pi$  acylated histidines formed during acylation of Boc-His-OMe  
 AUTHOR(S): Groenvald, F. C.; Lundt, B. F.; Johansen, N. L.  
 CORPORATE SOURCE: Novo Res. Inst., Copenhagen, Den.  
 SOURCE: Pept., Proc. Eur. Pept. Symp., 16th (1981), Meeting Date 1980, 706-10. Editor(s): Brunfeldt, K. Scriptor: Copenhagen, Den.  
 CODEN: 48NWA3  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English

AB When Boc-His-OMe (Boc = Me<sub>3</sub>CO<sub>2</sub>C) was acylated with adamantyloxycarbonyl fluoride (Adoc-F), Boc-His(Adoc)-OMe was obtained as an isomeric mixture of the NIm- $\tau$ - and NIm- $\pi$ -substituted compds. Boc-Ala-His(Adoc)-Phe-OMe obtained by an acylation with Adoc-F consisted of a similar isomeric mixture. When Boc-His-OMe was acylated with tosyl chloride or isobutyloxycarbonyl chloride, only the NIm- $\tau$ -substituted compds. were obtained. The position of acylation on the imidazole ring was determined by comparing the <sup>13</sup>C NMR spectra of the NIm-acylated compds. with the calculated spectra of NIm- $\tau$ - and NIm- $\pi$ -acetylhistidine.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (NIm-acylation by, of histidine derivative)

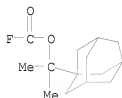
RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 133 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1982:616689 CAPLUS  
 DOCUMENT NUMBER: 97:216689  
 ORIGINAL REFERENCE NO.: 97:36389a,36392a  
 TITLE: The 1-(1-adamantyl)-1-methylethoxycarbonyl group for amino protection in peptide synthesis  
 AUTHOR(S): Voelter, Wolfgang; Kalbacher, Hubert  
 CORPORATE SOURCE: Inst. Org. Chem., Tuebingen Univ., Tuebingen, D-7400, Fed. Rep. Ger.  
 SOURCE: Pept., Proc. Eur. Pept. Symp., 16th (1981), Meeting Date 1980, 144-9. Editor(s): Brunfeldt, K. Scriptor: Copenhagen, Den.  
 CODEN: 48NWA3  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English

AB The title group (Adpoc) was incorporated into amino acids by N-acylating the amino acids with Adpoc-OPh, Adpoc-F, or Adpo-oxiimino-2-phenylacetonitrile. The resulting Adpoc amino acids are crystalline compds. and are stable over months at room temperature; they are also stable to UV light. The Adpoc group is cleaved under mild acidolytic conditions. Adpoc amino acids were used in the solid-phase synthesis of thymopoietin-(36-36), H-Arg-Lys-Asp-Val-Tyr-OH, and in the conventional

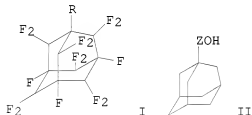
solution synthesis of thyrotropin-releasing hormone, pyroGlu-His-Pro-NH<sub>2</sub>.  
 IT 74654-74-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with amino acids)  
 RN 74654-74-3 CAPLUS  
 CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1.3,7]dec-1-ylethyl ester  
 (CA INDEX NAME)



L4 ANSWER 134 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1982:553115 CAPLUS  
 DOCUMENT NUMBER: 97:153115  
 ORIGINAL REFERENCE NO.: 97:25363a,25366a  
 TITLE: Electropreparation of alkyl-substituted  
 perfluoroadamantane  
 PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57079187	A	19820518	JP 1980-153995	19801031
JP 57043637	B	19820916		
PRIORITY APPLN. INFO.:			JP 1980-153995	19801031

GI



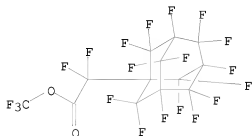
AB Alkyl-substituted perfluoroadamantones I [R = C1-4 straight chain  
 perfluoroalkyl] were obtained by the electrolytic fluorination of II [HOZ  
 =  $\alpha$ -hydroxy C1-4 straight chain alkyl] in anhydrous HF under an inert  
 gas cover.  
 IT 82829-41-2P



RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(synthesis of, by electrochem. fluorination of hydroxyalkyladamantane)

RN 82829-41-2 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-acetic acid,  $\alpha,\alpha,2,2,3,4,4,5,6,6,7,8,8,9,9,10,10$ -heptafluoro-, trifluoromethyl ester (CA INDEX NAME)



L4 ANSWER 135 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:218200 CAPLUS

DOCUMENT NUMBER: 96:218200

ORIGINAL REFERENCE NO.: 96:36080h,36081a

TITLE: Carbon-13 NMR spectroscopy of new amino protective groups

AUTHOR(S): Fuchs, Wolfram; Kalbacher, Hubert; Voelter, Wolfgang  
CORPORATE SOURCE: Abt. Org. Phys. Biochem., Univ. Tuebingen, Tuebingen, 7400, Fed. Rep. Ger.

SOURCE: Organic Magnetic Resonance (1981), 17(3), 157-62  
CODEN: ORMRED; ISSN: 0030-4921

DOCUMENT TYPE: Journal

LANGUAGE: English

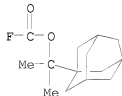
AB The <sup>13</sup>C NMR spectra 30 urethane group N-protected amino acids, e.g. N-(1-adamantyl-1-methylethoxycarbonyl)glycine, were recorded. The <sup>13</sup>C NMR parameters correlate to the speeds of acidolytic cleavage of the protective group.

IT 74654-74-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with amino acids)

RN 74654-74-3 CAPLUS

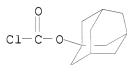
CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)



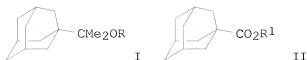
L4 ANSWER 136 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1981:585423 CAPLUS

DOCUMENT NUMBER: 95:185423  
 ORIGINAL REFERENCE NO.: 95:30927a,30930a  
 TITLE: Acylated tripeptides as chemotaxis antagonists  
 AUTHOR(S): Opitz, Wolfgang; Fruchtmann, Romanis  
 CORPORATE SOURCE: Chem. Abt., Troponwerke G.m.b.H., Cologne, D-5000/80, Fed. Rep. Ger.  
 SOURCE: Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie (1981), 362(8), 1037-41  
 CODEN: HSZPAZ; ISSN: 0018-4888  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB Four acyl derivs. of the chemotaxis N-formyl-L-Met-L-Leu-L-Phe were synthesized and studied for their chemotaxis inhibitory activity. Thus, N-(t-butylcarbonyl)-L-Met-L-Leu-L-Phe, N-adamantylloxycarbonyl-L-Met-L-Leu-L-Phe, N-adamantylcarbonyl-L-Met-L-Leu-L-Phe, and N-adamantylsulfinyl-L-Met-L-Leu-L-Phe inhibited N-formyl-L-Met-L-Leu-L-Phe-induced leukocyte chemotaxis. The effects of these acylated derivs. on leukocyte chemotaxis were not due to a direct effect of these substances on chemokinesis.  
 IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with methionyl-leucyl-phenylalanyl Me ester)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 137 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1981:140148 CAPLUS  
 DOCUMENT NUMBER: 94:140148  
 ORIGINAL REFERENCE NO.: 94:22965a,22968a  
 TITLE: 1-(1-Adamantyl)-1-methylethoxycarbonyl (ADPOC): a new group for amino protection in peptide synthesis with advantageous properties  
 AUTHOR(S): Voelter, W.; Kalbacher, H.  
 CORPORATE SOURCE: Inst. Org. Chem., Univ. Tuebingen, Tuebingen, 7400, Fed. Rep. Ger.  
 SOURCE: Pept., Struct. Biol. Funct., Proc. Am. Pept. Symp., 6th (1979), 325-8. Editor(s): Gross, Erhard; Meienhofer, Johannes. Pierce Chem. Co.: Rockford, Ill.  
 CODEN: 44LVAU  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 GI

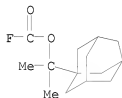


AB Adamantylisopropanol I (R = H) was treated with ClCO<sub>2</sub>Ph, FCOC<sub>1</sub>, and COC<sub>12</sub>/HON:CPhCN to give adamantane reagents I (R = CO<sub>2</sub>Ph, COF, and CON:CPhCN), which were treated with amino acids to give ADPOC amino acids. Adamantanecarboxylate II (R<sub>1</sub> = H) was esterified with PC<sub>15</sub>/EtOH to give II (R<sub>1</sub> = Et), which was treated with MeMgI to give I (R = H). ADPOC amino acids and peptides are stable for months at room temperature. The ADPOC group can be removed 1,000 times faster than the Me<sub>3</sub>CO<sub>2</sub>C group under very mild acidolytic conditions.

IT 74654-74-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction of, with amino acids)

RN 74654-74-3 CAPLUS

CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester  
(CA INDEX NAME)



L4 ANSWER 138 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1981:103796 CAPLUS

DOCUMENT NUMBER: 94:103796

ORIGINAL REFERENCE NO.: 94:16963a,16966a

TITLE: 1-(1-Adamantyl)-1-methylethoxycarbonyl (Adpoc) fluoride, a useful reagent for synthesis of a new class of protected amino acids with advantageous properties for peptide synthesis

AUTHOR(S): Kalbacher, Hubert; Voelter, Wolfgang

CORPORATE SOURCE: Inst. Org. Chem., Univ. Tuebingen, Tuebingen, D-7400, Fed. Rep. Ger.

SOURCE: Journal of the Chemical Society, Chemical Communications (1980), (24), 1265-6

CODEN: JCCCCAT; ISSN: 0022-4936

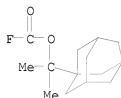
DOCUMENT TYPE: Journal

LANGUAGE: English

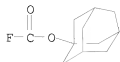
OTHER SOURCE(S): CASREACT 94:103796

AB Adpoc amino acids were prepared in 69-89% yields under mild conditions by acylating the amino acid with the title reagent (I) in DMF/Et<sub>2</sub>O containing Et<sub>3</sub>N at 0° for 6 h. I was prepared in 95% yield by treatment of 2-(1-adamantyl)propan-2-ol with FCOC<sub>1</sub> (CH<sub>2</sub>Cl<sub>2</sub>, Et<sub>3</sub>N, -40 to -30°, overnight).

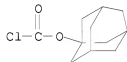
IT 74654-74-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and acylation by, of amino acids)  
 RN 74654-74-3 CAPLUS  
 CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester  
 (CA INDEX NAME)



L4 ANSWER 139 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:621035 CAPLUS  
 DOCUMENT NUMBER: 93:221035  
 ORIGINAL REFERENCE NO.: 93:35307a,35310a  
 TITLE: Structure-function studies on gastrointestinal hormones. I. Synthesis of secretin analogs and their biological and immunological properties  
 AUTHOR(S): Moroder, Luis; Jaeger, Ernst; Drees, Fritz; Gemeiner, Manfred; Knof, Siegfried; Stelzel, Hans Peter; Thamm, Paul; Bataille, Dominique; Domschke, Sigurd; et al.  
 CORPORATE SOURCE: Abt. Peptidchem., Max-Planck-Inst. Biochem., Martinsried, D-8033, Fed. Rep. Ger.  
 SOURCE: Bioorganic Chemistry (1980), 9(1), 27-54  
 CODEN: BOCMBM; ISSN: 0045-2068  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Gastrointestinal hormone analogs were prepared by crossing secretin (SN) at the invariant 6-position with the N-terminal hexapeptide sequences of vasoactive intestinal peptide (VIP), gastric inhibitory peptide (GIP) and glucagon (GLUN). Thus, Adoc-His(Adoc)-Ser(CMe3)-Asp(OCMe3)-Ala-Val-Phe-OH (Adoc = adamantyloxycarbonyl) was coupled with H-Thr(CMe3)-Ser(CMe3)-Glu(OCMe3)-Leu-Ser(CMe3)-Arg(HBr)-Leu-Arg(HBr)-Asp(OCMe3)-Ser(CMe3)-Ala-Arg(HBr)-Leu-Glu-Arg(HBr)-Leu-Leu-Gln-Gln-Leu-Val-NH<sub>2</sub> in DMF by dicyclohexylcarbodiimide/N-hydroxybenzotriazole to give the protected heptacosapeptide amide, which was deblocked to give [Ala<sup>4</sup>,Val<sup>5</sup>]-secretin (VIP-SN). [Gln<sup>3</sup>]-secretin (GLUN-SN) and [Tyr<sup>1</sup>,Ala<sup>2</sup>,Glu<sup>3</sup>]-secretin (GIP-SN) were prepared by a similar fragment condensation. [Phe<sup>1</sup>,Phe<sup>2</sup>,Trp<sup>3</sup>,Lys<sup>4</sup>]-secretin a secretin analog containing the 6-13 sequence of somatostatin as the N-terminal octapeptide sequence, and Na-3-(4-hydroxyphenyl)propionyl-β-Ala-secretin were also prepared by fragment condensations. The biol. and immunol. properties of the above peptides were compared to those of synthetic secretin.  
 IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with histidine-containing peptide derivative)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



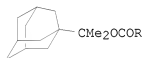
L4 ANSWER 140 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:514959 CAPLUS  
 DOCUMENT NUMBER: 93:114959  
 ORIGINAL REFERENCE NO.: 93:18433a,18436a  
 TITLE: Peptides. XXXIV. Synthesis of the 1-16 fragment of a lysozyme analog  
 AUTHOR(S): Galpin, I. J.; Hancock, F. E.; Handa, B. K.; Jackson, A. G.; Kenner, G. W.; Ramage, R.; Singh, B.  
 CORPORATE SOURCE: Robert Robinson Lab., Univ. Liverpool, Liverpool, L69 3BX, UK  
 SOURCE: Tetrahedron (1979), 35(23), 2771-8  
 CODEN: TETRAB; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Protected title peptide, Adoc-Lys(Adoc)-Val-Phe-Gly-Orn(Adoc)-Cys(Acm)-Glu(OCMe3)-Leu-Ala-Ala-Ala-Nle-Lys(Adoc)-Ala-Leu-Gly-OPh (I; Adoc = adamantyloxycarbonyl, Acm = CH2NHAc) was prepared by deblocking Z-Ala-Nle-Lys(Adoc)-Ala-Leu-Gly-OPh (II, Z = PhCH2O2C) by hydrogenolysis and coupling the resulting Z-deblocked hexapeptide with Adoc-Lys(Adoc)-Val-Phe-Gly-Orn(Adoc)-Cys(Acm)-Glu(OCMe3)-Leu-Ala-Ala-OH (III) by dicyclohexylcarbodiimide (DCC)/N-hydroxysuccinimide (HONSu). I was purified by gel filtration on Sephadex LH-60 by elution with N-methylpyrrolidone. II was prepared by stepwise peptide coupling reactions, whereas III was prepared by coupling Adoc-Lys(Adoc)-Val-Phe-Gly-OH to H-Orn(Adoc)-Cys(Acm)-Glu(OCMe3)-Leu-Ala-Ala-OPh by DCC/HONSu and cleaving the Ph ester from the resulting protected decapeptide ester.  
 IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with lysine and ornithine)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 141 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:514050 CAPLUS  
 DOCUMENT NUMBER: 93:114050  
 ORIGINAL REFERENCE NO.: 93:18244h,18245a  
 TITLE: Adamantanepropyl esters as protective groups  
 INVENTOR(S): Karlbaha, H.; Bowter, B.  
 PATENT ASSIGNEE(S): Luxembourg

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55043087	A	19800326	JP 1979-115646	19790907
JP 06062511	B	19940817		
EP 10587	A1	19800514	EP 1979-103160	19790827
EP 10587	B1	19830601		
R: AT, BE, CH, DE, FR, GB, IT, NL, SE				
AT 3634	T	19830615	AT 1979-103160	19790827
JP 62246548	A	19871027	JP 1986-316102	19861226
JP 01052748	A	19890228	JP 1988-86213	19880406
JP 03017824	B	19910311		
PRIORITY APPLN. INFO.:			LU 1978-80207	A 19780907
			EP 1979-103160	A 19790827
			JP 1979-115646	19790907
OTHER SOURCE(S):			MARPAT 93:114050	
GI				

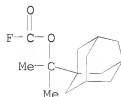


AB Adamantanepropyl esters (I; R = F, PhO, amino acid residue), useful as protective groups in peptide synthesis, were prepared. Thus, a mixture of 0.1 mol 2-(1-adamantyl)-2-propanol, 14 mL Et3N, and FCOC1 containing SO3 (by reaction of 60 g 65% fuming H2SO4 with 25 mL FCC13) in Et2O was kept at 40°. Et3N.HCl was filtered off, and the mixture degassed at 10° and 200 mm Hg to give 95% I (R = F). Similarly prepared were I (R = PhO) and 13 amino acid derivs., e.g., I (R = NHCH2CO2H).

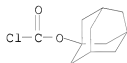
IT 74654-74-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 74654-74-3 CAPLUS

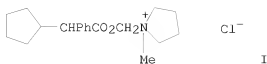
CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1.3,7]dec-1-ylethyl ester (CA INDEX NAME)



L4 ANSWER 142 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:198749 CAPLUS  
 DOCUMENT NUMBER: 92:198749  
 ORIGINAL REFERENCE NO.: 92:32219a,32222a  
 TITLE: The syntheses of human big gastrin I and its  
 32-lucine analog. 2. Preparation of fragments 9-14  
 and 1-8  
 AUTHOR(S): Wendlberger, Gerhard; Moroder, Luis; Thamm, Paul;  
 Wilschowitz, Ludwig; Wuensch, Erich  
 CORPORATE SOURCE: Abt. Peptidchem., Max-Planck-Inst. Biochem.,  
 Martinsried, D-8033, Fed. Rep. Ger.  
 SOURCE: Monatshefte fuer Chemie (1979), 110(6), 1317-30  
 CODEN: MOCMB7; ISSN: 0026-9247  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB The title 1-8 fragment pyroGlu-Leu-Gly-Pro-Gln-Gly-His-Pro-OH was prepared  
 by coupling pyroGlu-Leu-Gly-Pro-Gln-Gly-OH (I) with H-His-Pro-OCMe3 by  
 dicyclohexylcarbodiimide/N-hydroxysuccinimide and cleaving the tert-Bu  
 ester from the resulting pyroGlu-Leu-Gly-Pro-Gln-Gly-His-Pro-OCMe3.  
 Z-Gly-Pro-ONSu (Z = PhCH2O2C, NSu = succinimido) was coupled to  
 H-Gln-Gly-OCMe3 to give the tetrapeptide, which was Z-deblocked and then  
 coupled to Z-Leu-ONSu to give Z-Leu-Gly-Pro-Gln-Gly-OCMe3. The latter was  
 Z-deblocked and then coupled to pyroGlu-OC6H2Cl3 to give the hexapeptide  
 tert-Bu ester, which was de-tert-butylated with CF3CO2H to give I. The  
 title 9-14 fragment o-O2NC6H4S-Ser(CMe3)-Leu-Val-Ala-Asp(OCMe3)-Pro-OH was  
 prepared by stepwise active ester couplings.  
 IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with histidine-containing peptide)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 143 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:191082 CAPLUS  
 DOCUMENT NUMBER: 92:191082  
 ORIGINAL REFERENCE NO.: 92:30825a,30828a  
 TITLE: Soft drugs. 3. A new class of anticholinergic agents  
 AUTHOR(S): Bodor, Nicholas; Woods, Ross; Raper, Colin; Kearney,  
 Pauline; Kaminski, James J.  
 CORPORATE SOURCE: Coll. Pharm., Univ. Florida, Gainesville, FL, 32610,  
 USA  
 SOURCE: Journal of Medicinal Chemistry (1980), 23(5), 474-80  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

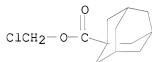


AB The title compds., quaternary ammonium esters in which there is only 1 C separating the ester O and the quaternary head, were prepared from alkylating agents, followed by their reaction with tertiary amines.  
 (±)-1-[(Cyclopentylphenylacetyl)oxyl]-1-methylpyrrolidinium chloride [(±)-I] [71570-38-2] was very effective in controlling eccrine sweating in man. The more effective anticholinergics had ≤10 times higher acetylcholine antagonist activity than atropine, but a much shorter duration of action. They hydrolyzed with simultaneous destruction of the quaternary head. The potency of the compds. was affected by the amine moiety. Structure-activity relations are discussed.

IT 71570-32-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and quaternization of tertiary amines by)

RN 71570-32-6 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid, chloromethyl ester (CA INDEX NAME)



L4 ANSWER 144 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1979:589328 CAPLUS  
 DOCUMENT NUMBER: 91:189328  
 ORIGINAL REFERENCE NO.: 91:30447a,30450a  
 TITLE: phloretyl-β-alanyl-secretin  
 INVENTOR(S): Wuensch, Erich  
 PATENT ASSIGNEE(S): Max-Planck-Gesellschaft zur Foerderung der  
 Wissenschaften e.V., Fed. Rep. Ger.  
 SOURCE: U.S., 8 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

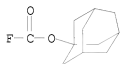
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4167508	A	19790911	US 1977-807533	19770617
DE 2627988	A1	19780105	DE 1976-2627988	19760623
PRIORITY APPLN. INFO.:			DE 1976-2627988	A 19760623
OTHER SOURCE(S):	MARPAT 91:189328			

AB Methods are described for the preparation of phloretyl-β-alanylsecretin (I), I radioiodination with <sup>125</sup>I, and the use of radioiodinated I and a



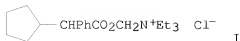
secretin-specific antibody for the radioimmunoassay of secretin in biol. samples. Procedures also are discussed for preparing salts and protected derivs. of I and their radioiodination.

IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with phenylalanine-containing peptides)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 145 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1979:557748 CAPLUS  
 DOCUMENT NUMBER: 91:157748  
 ORIGINAL REFERENCE NO.: 91:25465a,25468a  
 TITLE: Anticholinergic substances with an antisecretory effect and their use  
 INVENTOR(S): Bodor, Nicholas Stephen  
 PATENT ASSIGNEE(S): INTERx Research Corp., USA  
 SOURCE: Ger. Offen., 70 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2854308	A1	19790621	DE 1978-2854308	19781215
DK 7805341	A	19790617	DK 1978-5341	19781129
NO 7804229	A	19790619	NO 1978-4229	19781215
NO 148776	B	19830905		
NO 148776	C	19831214		
JP 54098711	A	19790803	JP 1978-156013	19781215
SE 436027	B	19841105	SE 1978-12911	19781215
SE 436027	C	19850214		
NL 7812257	A	19790619	NL 1978-12257	19781218
AU 7842646	A	19790621	AU 1978-42646	19781218
AU 531835	B2	19830908		
GB 2010270	A	19790627	GB 1978-48850	19781218
GB 2010270	B	19821020		
FR 2422624	A1	19791109	FR 1978-35596	19781218
FR 2422624	B1	19831014		
CA 1102345	A1	19810602	CA 1978-318112	19781218
AT 7809014	A	19810815	AT 1978-9014	19781218
AT 366380	B	19820413		
PRIORITY APPLN. INFO.:			US 1977-861210	A 19771216
OTHER SOURCE(S):	MARPAT	91:157748		
GI				

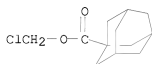


AB RR1R2CCOX1CHR3N+R4R5R6 X- (R-R3 = optionally substituted C1-8 alkyl, aryl, cycloalkyl, cycloalkenyl; CRR1R2 = cyclic; NR4R5R6 = amino; X = anion; X1 = O, S) were prepared. Thus, cyclopentylphenylacetyl chloride was treated with CH2O to give chloromethyl cyclopentylphenylacetate, which was treated with NEt3 to give the quaternary salt I. The salts have anticholinergic and antiperspirant activity.

IT 71570-32-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and quaternization of amines by)

RN 71570-32-6 CAPLUS

CN Tricyclo[3.3.1.1.3,7]decane-1-carboxylic acid, chloromethyl ester (CA INDEX NAME)



L4 ANSWER 146 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1978:152109 CAPLUS

DOCUMENT NUMBER: 88:152109

ORIGINAL REFERENCE NO.: 88:23957a,23960a

TITLE: Adamantyl perfluoroisobutenyl ethers

AUTHOR(S): Kryukov, L. N.; Vitkovskii, V. S.; Kryukova, L. Yu.; Isaev, V. L.; Sterlin, R. N.; Knunyants, I. L.

CORPORATE SOURCE: USSR

SOURCE: Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva im. D. I. Mendeleeva (1978), 23(1), 115  
 CODEN: ZVKOA6; ISSN: 0373-0247

DOCUMENT TYPE: Journal

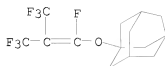
LANGUAGE: Russian

AB Treating (F3C)2C:CF2 with ROH (R = 2-naphthyl, 1- and 2-adamantyl) and Na gave 33-41% (F3C)2C:CFOR.

IT 66258-26-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 66258-26-2 CAPLUS

CN Tricyclo[3.3.1.1.3,7]decane, 1-[[1,3,3,3-tetrafluoro-2-(trifluoromethyl)-1-propenyl]oxy]- (9CI) (CA INDEX NAME)



L4 ANSWER 147 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1978:148588 CAPLUS  
 DOCUMENT NUMBER: 88:148588  
 ORIGINAL REFERENCE NO.: 88:23383a,23386a  
 TITLE: Secretin determination  
 INVENTOR(S): Wuensch, Erich  
 PATENT ASSIGNEE(S): Max-Planck-Gesellschaft zur Foerderung der  
 Wissenschaften e.V., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 31 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2627988	A1	19780105	DE 1976-2627988	19760623
CH 629474	A5	19820430	CH 1977-6712	19770601
US 4167508	A	19790911	US 1977-807533	19770617
FR 2355806	A1	19780120	FR 1977-19285	19770623
JP 53018568	A	19780220	JP 1977-73935	19770623

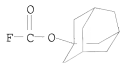
PRIORITY APPLN. INFO.: DE 1976-2627988 A 19760623

AB Phloretyl- $\beta$ -alanylsecretin is synthesized, labeled with  $^{125}\text{I}$ , and used in the radioimmunoassay of secretin. Thus, 3-(4-hydroxyphenyl)propionic acid was reacted with 4-nitrobenzyl bromide in DMF to yield 4-nitrobenzyl 3-(4-hydroxyphenyl)propionate. The latter was reacted with isobutene to yield the 4-tert-butoxy derivative that was saponified with NaOH and reacted with N-hydroxysuccinimide to form 3-(4-tert-butoxyphenyl)propionic acid succinimido ester. The latter was reacted with  $\beta$ -alanine to form 3-(4-tert-butoxyphenyl)propanoyl- $\beta$ -alanine that was used in a series of steps to yield phloretyl- $\beta$ -alanylsecretin. The latter was labeled with  $^{125}\text{I}$  to a sp. activity of 350  $\mu\text{Ci}/\mu\text{g}$ . This was used in a radioimmunoassay procedure for determining secretin in solution at 0-125 pg/mL.

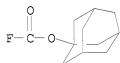
IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with heptapeptide, secretin determination in relation to)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 148 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1977:602090 CAPLUS  
 DOCUMENT NUMBER: 87:202090  
 ORIGINAL REFERENCE NO.: 87:32015a,32018a  
 TITLE: Total synthesis of human big gastrin I and the 32-leucine analog. (Preliminary communication)  
 AUTHOR(S): Wuensch, E.; Wendlberger, G.; Hallett, A.; Jaeger, E.; Knof, S.; Moroder, L.; Scharf, R.; Schmidt, I.; Thamm, P.; Wilschowitz, L.  
 CORPORATE SOURCE: Abt. Peptidchem., Max-Planck-Inst. Biochem., Munich, Fed. Rep. Ger.  
 SOURCE: Zeitschrift fuer Naturforschung, C: Journal of Biosciences (1977), 32C(7-8), 495-506  
 CODEN: ZNCBDA; ISSN: 0939-5075  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 GI For diagram(s), see printed CA Issue.  
 AB Human big gastrin I (I) was prepared by coupling a protected 1-8 fragment to a protected 9-34 fragment (II) and deblocking the resulting protected 1-34 fragment. Protected peptide fragments related to sequences 9-14, 15-30, 21-22, 23-27, and 28-34 were prepared and used in the fragment peptide synthesis of II. The 32-leucine analog of I was also prepared  
 IT 62087-82-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (acylation by, of imidazole of histidine-containing peptide)  
 RN 62087-82-5 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 149 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1977:140430 CAPLUS  
 DOCUMENT NUMBER: 86:140430  
 ORIGINAL REFERENCE NO.: 86:22069a,22072a  
 TITLE: 1-Adamantyl fluoroformate, a new reagent for the introduction of the 1-adamantyloxycarbonyl protecting group  
 AUTHOR(S): Moroder, Luis; Wackerle, Lorenz; Wuensch, Erich  
 CORPORATE SOURCE: Abt. Peptidchem., Max-Planck-Inst. Biochem., Munich, Fed. Rep. Ger.  
 SOURCE: Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie

(1976), 357(11), 1647-50  
 CODEN: HSZPAZ; ISSN: 0018-4888  
 Journal  
 German

DOCUMENT TYPE:  
 LANGUAGE:  
 GI

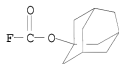


AB 1-Adamantyl fluoroformate (I, R1 = F) was prepared in 91% yield by acylating 1-adamantanol with ClCOF. I [R1 = Ala-OH, Asn-OH, Asp(OCH2Ph)-OH, Gln-OH, Glu(OCH2Ph)-OH, Val-OH] were prepared in 84-94% yields by treating the appropriate amino acid with I (R1 = F). Histidine derivs. which had the imidazolyl group protected with the 1-adamanyloxycarbonyl group were also prepared

IT 62087-82-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, with amino acids)

RN 62087-82-5 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 150 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:543446 CAPLUS

DOCUMENT NUMBER: 85:143446

ORIGINAL REFERENCE NO.: 85:23005a,23008a

TITLE: Facile synthesis of Na-(benzyloxycarbonyl)histidine and its use in the preparation of various histidine derivatives protected at the imidazole-N

AUTHOR(S): Eckstein, Heiner

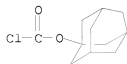
CORPORATE SOURCE: Inst. Org. Chem. I, Univ. Tuebingen, Tuebingen, Fed. Rep. Ger.

SOURCE: Justus Liebig's Annalen der Chemie (1976), (7-8), 1289-94

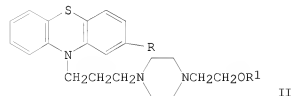
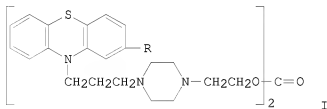
CODEN: JLACBF; ISSN: 0075-4617

DOCUMENT TYPE: Journal

LANGUAGE: German  
 AB PhCH2O2C-His-OH (I) was prepared by direct acylation of histidine with PhCH2O2CCl. I reacted with (R = 4-Me C6H4SO2, adamantyloxycarbonyl, Me3CO2C3 X = Cl, F) to give PhCH2O2C-His(R)-OH. Attempts to obtain crystalline PhCH2O2C-His[C6H3(NO2)2]-OH failed.  
 IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with benzyloxycarbonyl histidine)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 151 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1976:523872 CAPLUS  
 DOCUMENT NUMBER: 85:123872  
 ORIGINAL REFERENCE NO.: 85:19889a,19892a  
 TITLE: Synthesis of 2-substituted 4-[3-(10-phenothiazinyl)propyl]-1-piperazinylethyl carbonates Spasskaya, I. F.; Lapin, I. P.  
 AUTHOR(S): USSR  
 CORPORATE SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1976), 10(4), 24-7  
 SOURCE: CODEN: KHFZAN; ISSN: 0023-1134  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 OTHER SOURCE(S): CASREACT 85:123872  
 GI

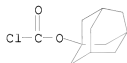


AB Carbonates I (R = Cl, CF<sub>3</sub>) and their HCl and maleate salts were prepared by reaction of the alc. II (R<sub>1</sub> = H) (III) with II (R<sub>1</sub> = COCl) (prepared by reaction of III with COCl<sub>2</sub>). II (R<sub>1</sub> = 1-adamantyloxycarbonyl) were prepared by reaction of III with 1-adamantyl chloroformate. I (R = CF<sub>3</sub>) at 4/mg/kg (i.p. mice) had long-term neuroleptic activity.

IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with [(phenothiazinyl)propyl]piperazinyethanol)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 152 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:84737 CAPLUS

DOCUMENT NUMBER: 84:84737

ORIGINAL REFERENCE NO.: 84:13861a,13864a

TITLE: Identification and biological activity of peptides containing a partially benzyloxycarbonylated L-arginine on their amino terminus

AUTHOR(S): Eisele, Karl

CORPORATE SOURCE: Physiol. Chem. Inst., Univ. Tuebingen, Tuebingen, Fed. Rep. Ger.

SOURCE: Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie (1975), 356(10), 1497-503  
 CODEN: HSZPAZ; ISSN: 0018-4888

DOCUMENT TYPE: Journal

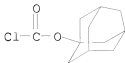
LANGUAGE: German

AB Nø-Z-L-Arg-L-Phe-L-Phe-HCl [58200-52-5] (Z = benzyloxycarbonyl) was the antibioticly active compound in a peptide mixture which was obtained by treating Z3-L-Arg-L-Phe-L-Phe [58200-53-6] with HBr-F3CCO<sub>2</sub>H or 4 N HBr-HOAc. Identification of this compound was achieved by thin-layer chromatog., enzymic digestion and autobiograms with fungi. The pure Nø-Z-L-Arg-L-Phe-L-Phe was not the only compound with antibiotic qualities; generally, all peptides with the sequence Nø-Z-L-Arg-X-L-Phe (X might be any amino acid) are antibioticly active. All were antagonized by L-aspartic acid [56-84-8] and asparagine [70-47-3] in the cross-strip test (on fungi). The antibiotic activity of all these peptides must be due to the Nø-Z-L-Arg-residue provided that it is coupled to a dipeptide X-L-Phe, or to an aromatic system (e.g., L-phenylalanine or benzylamine).

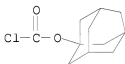
IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with benzyloxycarbonyl arginine)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 153 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1974:27459 CAPLUS  
 DOCUMENT NUMBER: 80:27459  
 ORIGINAL REFERENCE NO.: 80:4537a,4540a  
 TITLE: Arginine derivatives for peptide syntheses  
 AUTHOR(S): Losse, Guenter; Rueger, Carla  
 CORPORATE SOURCE: Sek. Chem., Tech. Univ. Dresden, Dresden, Fed. Rep. Ger.  
 SOURCE: Zeitschrift fuer Chemie (1973), 13(9), 344-5  
 CODEN: ZECEAL; ISSN: 0044-2402  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB Ng-(Benzyloxycarbonyl)- (I), N8,N8-diadamantyl- (II), and Ng-trityl-Na-(tert-butoxycarbonyl)arginine (III) were prepared from N a<sup>o</sup>-(tert-butoxycarbonyl)arginine and PhCH2O2CN3, adamantyloxycarbonyl chloride, or trityl chloride, resp. For solid phase syntheses of peptides only I was useful, because II and III were not stable against CF3CO2H-CH2Cl2.  
 IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with (tert-butoxycarbonyl)arginine)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 154 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1972:500906 CAPLUS  
 DOCUMENT NUMBER: 77:100906  
 ORIGINAL REFERENCE NO.: 77:16631a,16634a  
 TITLE: Comparison of decomposition and solvolysis reactions of 1-adamantyl chloroglyoxylate and 1-adamantyl chloroformate  
 AUTHOR(S): Kevill, D. N.; Weitz, F. L.  
 CORPORATE SOURCE: Dep. Chem., North. Ill. Univ., DeKalb, IL, USA  
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1972), (17), 2162-4  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

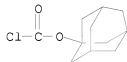


AB Decomposition of 1-adamantyl chloroglyoxylate (I) in PhNO<sub>2</sub> at 105° is .apprx.40,000 times slower than the analogous decomposition of 1-adamantyl chloroformate (II). In C<sub>6</sub>H<sub>6</sub> at 105°, I formed 13% 1-phenyladamantane. Decomposition reactions of I may be homolytic. I underwent a rapid methanolysis to give the mixed oxalate ester. II gave mixed carbonate esters in the presence of alkoxide or upon extensive dilution of the alc. with C<sub>6</sub>H<sub>6</sub>.

IT 5854-52-4  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction with alcs.)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 155 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:509891 CAPLUS

DOCUMENT NUMBER: 75:109891

ORIGINAL REFERENCE NO.: 75:17351a,17354a

TITLE: Substitution reactions of bridgehead derivatives of adamantane

AUTHOR(S): Kevill, Dennis N.; Weitl, Frederick L.; Sister Virginia M. Horvath

CORPORATE SOURCE: Dep. Chem., North. Illinois Univ., DeKalb, IL, USA

SOURCE: Preprints - American Chemical Society, Division of Petroleum Chemistry (1970), 15(2), B66-B70

CODEN: ACPCAT; ISSN: 0569-3799

DOCUMENT TYPE: Journal

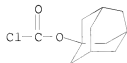
LANGUAGE: English

AB In addition to reactions proceeding by conventional ionization mechanisms, nucleophilic substitution reactions considered include the decomposition of 1-adamantyl chloroformate in inert aprotic solvents, the competing solvolysis-decomposition of 1-adamantyl chloroformate in both protic and aprotic solvents, and the electrophilically assisted reactions of 1-adamantyl halides with alc. AgNO<sub>3</sub> and silver perchlorate. The thermal reactions of 1-adamantyl chloroglyoxalate are discussed.

IT 5854-52-4  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(solvolysis of)

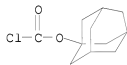
RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 156 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1971:141834 CAPLUS  
 DOCUMENT NUMBER: 74:141834  
 ORIGINAL REFERENCE NO.: 74:22923a,22926a  
 TITLE: Antibiotic 7- $\alpha$ -aminoacyl cephalosporins  
 INVENTOR(S): Morin, Robert B.  
 PATENT ASSIGNEE(S): Eli Lilly and Co.  
 SOURCE: U.S., 7 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3560489	A	19710202	US 1966-571966	19660812
PRIORITY APPLN. INFO.:				US 1966-571966	A 19660812
AB	The title compds. were prepared by the acylation of 7-amino-cephalosporanic acid (I). Thus, N-carbobenzoxy-D-phenylglycine in dry THF was treated with Et3N and ClCO2Bu-iso. I and Et3N in THF and H2O was added to the mixture to give 7-(N-carbobenzoxy-D- $\alpha$ -aminophenylacetamido)cephalosporanic acid (II). H was bubbled into II and 5% Pd-C in 95% EtOH at room temperature to yield 7-(D- $\alpha$ -aminophenylacetamido)cephalosporanic acid. Other analogs were prepared by conventional acylation procedures.				
IT	5854-52-4P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)				
RN	5854-52-4 CAPLUS				
CN	Carbonochloridic acid, tricyclo[3.3.1.1 <sup>3,7</sup> ]dec-1-yl ester (CA INDEX NAME)				



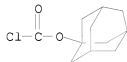
L4 ANSWER 157 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1971:124417 CAPLUS  
 DOCUMENT NUMBER: 74:124417  
 ORIGINAL REFERENCE NO.: 74:20107a,20110a  
 TITLE: Competing solvolysis-decomposition of 1-adamantyl chloroformate  
 AUTHOR(S): Kevill, Dennis N.; Weitl, Frederick L.  
 CORPORATE SOURCE: Dep. Chem., North. Illinois Univ., DeKalb, IL, USA  
 SOURCE: Tetrahedron Letters (1971), (9), 707-10  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB In alc. solns. I (X = O2CCl) undergoes 2 competing reactions: solvolysis with the formation of 1-adamantyl alkyl carbonates and decomposition to I carbonium ion (II), Cl<sup>-</sup>, and CO2. The decomposition is followed by the

recombination of II with Cl<sup>-</sup> and by II reaction with the solvent giving an ether. The ethers are not formed from the carbonates. The activation entropies of I (X = O<sub>2</sub>CCl) solvolysis-decomposition are 16-20 entropy units more pos. than the solvolysis entropies of I (X = halide) in alcs., due to the loss of CO<sub>2</sub> preceeding or concurrent with II formation and I ionization. In dioxane, EtOH, MeOH, or acetone the solvolysis amts. to 55.5-80% of I solvolysis-decomposition process.

IT 5854-52-4

RL: RCT (Reactant); RACT (Reactant or reagent)  
(solvolysis of, mechanism of)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

L4 ANSWER 158 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:12327 CAPLUS

DOCUMENT NUMBER: 74:12327

ORIGINAL REFERENCE NO.: 74:1993a,1996a

TITLE: Solvolysis of 1-adamantyl chloroformate and related  
compounds in protic and aprotic media  
Weitl, Frederick L.

AUTHOR(S):  
CORPORATE SOURCE: Northern Illinois Univ., DeKalb, IL, USA  
SOURCE: (1969) 167 pp. Avail.: 70-3456

From: Diss. Abstr. Int. B 1970, 30(9), 4070

DOCUMENT TYPE: Dissertation

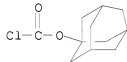
LANGUAGE: English

AB Unavailable

IT 5854-52-4

RL: RCT (Reactant); RACT (Reactant or reagent)  
(solvolysis of)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

L4 ANSWER 159 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1969:58138 CAPLUS

DOCUMENT NUMBER: 70:58138

ORIGINAL REFERENCE NO.: 70:10937a,10940a

TITLE: 1-Adamantyl- and 1-adamantylmethyl carbonates of  
testosterone

INVENTOR(S): Boswell, George A., Jr.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.  
 SOURCE: S. African, 27 pp.  
 CODEN: SFXAB  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ZA 6706588		19680308	ZA	
DE 1668559			DE	
FR 1579481			FR	
FR 7327			FR	
GB 1187611			GB	
GB 1187659			GB	
GB 1187660			GB	
US 3433813		19690318	US	19661129
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PRIORITY APPLN. INFO.:

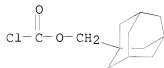
OTHER SOURCE(S): MARPAT 70:58138

AB Anabolic-androgenic agents were prepared 19-Nortestosterone (25.0 g.) in 100 cc. CH<sub>2</sub>Cl<sub>2</sub> was shaken with 75 g. carbonyl fluoride under pressure 10 hrs. at 20 ± 2° to give 23.4 g. 19-nortestosterone fluoroformate (I), m. 83-3.5°; [α]<sub>D</sub><sup>25</sup> 34° (c 1.47, CHCl<sub>3</sub>). Similarly prepared was testosterone fluoroformate, m. 104-6°, [α]<sub>D</sub><sup>25</sup> 86° (c 2.33, CHCl<sub>3</sub>). I (1.0 g.) and 10 g. 1-adamantanemethanol in 75 cc. benzene containing 0.5 cc. pyridine was refluxed under N 24 hrs. to give 0.646 g. 19-nortestosterone 1'-adamantylmethyl carbonate, m. 142.5-3.5°, [α]<sub>D</sub><sup>25</sup> 42° (c 1.65, CHCl<sub>3</sub>). Similarly prepared was testosterone 1'-adamantylmethyl carbonate, m. 158-9°, [α]<sub>D</sub><sup>25</sup> 79° (c 1.32, CHCl<sub>3</sub>). Similarly prepared, from 1-adamantyl chloroformate (m. 52-3°; from 1-adamantol and phosgene) was 19-nortestosterone 1'-adamantyl carbonate, m. 167°, [α]<sub>D</sub><sup>25</sup> 35° (c 1.43, CHCl<sub>3</sub>). Phosgene was bubbled through 400 cc. Et<sub>2</sub>O 2 hrs. at 0°, the solution diluted to 800 cc. with Et<sub>2</sub>O, 100 g. adamantane-1-methanol added, and the mixture stirred 24 hrs. to give 1-adamantylmethyl chloroformate (II), m. 54-5°. Testosterone (13.0 g.) in benzene was refluxed with 12 g. II and 10 cc. pyridine 40 hrs. to give 15 g. 17β-hydroxy-4-androsten-3-one 1'-adamantylmethyl carbonate, m. 157-8°. Ir and uv spectral data were given for the compds.

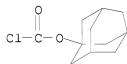
IT 21317-84-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 21317-84-0 CAPLUS

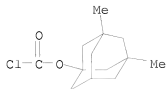
CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethyl ester (CA INDEX NAME)

L4 ANSWER 160 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1969:46538 CAPLUS  
DOCUMENT NUMBER: 70:46538  
ORIGINAL REFERENCE NO.: 70:8719a,8722a  
TITLE: Kinetics and mechanism of the decomposition of  
1-adamantyl chloroformate  
AUTHOR(S): Kevill, Dennis N.; Weitl, Frederick L.  
CORPORATE SOURCE: Northern Illinois Univ., DeKalb, IL, USA  
SOURCE: Journal of the American Chemical Society (1968),  
90(23), 6416-20  
CODEN: JACSAT; ISSN: 0002-7863  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 70:46538  
AB 1-Adamantyl chloroformate decompose in decane or in the molten phase to give  
exclusively 1-adamantyl chloride. In benzene a very small amount of acid  
formation occurs, 0.5% at 54.2°, and a 94% yield of 1-adamantyl  
chloride. Increased, but still small amts. of acid production accompany  
decomposition in nitrobenzene and mixts. of nitrobenzene with benzene. From a  
reaction with Ag hexafluoroantimonate in nitrobenzene,  
1-(m-nitrophenyl)adamantane was isolated and characterized. At  
54.2°, the relative rates of decomposition of 0.06M solns. in decane,  
benzene, and nitrobenzene are 1:1260:-205,000. In benzene, the entropy of  
a citation is -12.0 entropy units and slightly less neg. values are  
obtained in nitrobenzene and benzene-nitrobenzene mixts.; similar values  
were reported for SN1 solvolyses of 1-adamantyl halides. In nitrobenzene,  
tetra-n-butylammonium chloride modestly accelerates the decomposition, and the  
extent of acid formation decreases in a manner consistent with the rate of  
solvolysis in the absence of added chloride (3.0% at 15.0°) being  
equal to the rate of production of dissociated 1-adamantyl carbonium ions.  
IT 5854-52-4  
RL: PRP (Properties)  
(dissociation of, kinetics of)  
RN 5854-52-4 CAPLUS  
CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 161 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1968:451736 CAPLUS  
DOCUMENT NUMBER: 69:51736  
ORIGINAL REFERENCE NO.: 69:9643a,9646a  
TITLE: 1-Adamantyl carbazates  
INVENTOR(S): Gerzon, Koert; Krumkalns, Eriks V.  
PATENT ASSIGNEE(S): Lilly, Eli and Co.  
SOURCE: U.S., 4 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1





L4 ANSWER 162 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1966:499665 CAPLUS

DOCUMENT NUMBER: 65:99665

ORIGINAL REFERENCE NO.: 65:18683h,18684a-b

TITLE: Adamantyl compounds

PATENT ASSIGNEE(S): Eli Lilly &amp; Co.

SOURCE: 8 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6600403		19660722	NL 1966-403	19660112
			US	19650121

PRIORITY APPLN. INFO.:

AB New adamantyloxycarbonyl derivs. (I) of  $\alpha$ -amino acids were prepared I includes derivs. of naturally occurring  $\alpha$ -amino acids and is a suitable blocking group in synthesis of peptides, penicillins, or cephalosporins. This blocking group can be removed with F3CCO2H, anhydrous HCl, or by other known methods. Thus, to 20 g. COCl2 in 100 ml. anhydrous C6H6, a mixture of 8 g. 1-hydroxyadamantane, 6 g. pyridine, and 200 ml. ether was added dropwise at .apprx.20° during 1 hr. to give 1-adamantyl chloroformate, m. 46-7°. Similarly, 3,5-dimethyl-1-hydroxyadamantyl chloroformate, m. .apprx.5-10°, and 3-hydroxyhomoadamantyl chloroformate, m. .apprx.0°, were prepared To 151 mg. D-phenylglycine in 2 ml. H2O and 1.2 ml. N NaOH, a solution of 225 mg. 1-adamantyl chloroformate in 2.5 ml. dioxane and 1 ml. ether was added in 5 portions during 40 min. After addition of 1 ml. N NaOH, the reaction mixture was extracted with ether, acidified with 85% H3PO4 to pH 4.5, and extracted

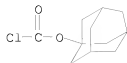
with ether to give N-(1-adamantyloxycarbonyl)-D-phenylglycine, m. 119-20°. Also prepared was the glycine analog, m. 141-2.5°.

IT 5854-52-4P, Formic acid, chloro-, 1-adamantyl ester  
10144-56-6P, 1-Adamantanol, 3,5-dimethyl-, chloroformate  
10144-78-2P, 1-Adamantanol, 3-methyl-, chloroformate  
RL: PREP (Preparation)

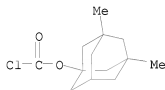
(preparation of)

RN 5854-52-4 CAPLUS

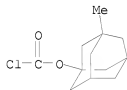
CN Carbonochloridic acid, tricyclo[3.3.1.1.3]dec-1-yl ester (CA INDEX NAME)



RN 10144-56-6 CAPLUS  
CN Carbonochloridic acid, 3,5-dimethyltricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



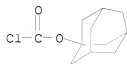
RN 10144-78-2 CAPLUS  
CN Carbonochloridic acid, 3-methyltricyclo[3.3.1.1.3,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 163 OF 163 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1966:104659 CAPLUS  
DOCUMENT NUMBER: 64:104659  
ORIGINAL REFERENCE NO.: 64:19757h,19758a  
TITLE: Adamantyloxycarbonyl, a new blocking group.  
Preparation of 1-adamantyl chloroformate  
AUTHOR(S): Haas, W. L.; Krumkalns, E. V.; Gerzon, K.  
CORPORATE SOURCE: Lilly Res. Labs., Eli Lilly & Co., Indianapolis, IN  
SOURCE: Journal of the American Chemical Society (1966),  
88(9), 1988-92  
CODEN: JACSAT; ISSN: 0002-7863  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 64:104659  
AB 1-Adamantyl chloroformate was prepared from 1-adamantanol and COCl<sub>2</sub>. The chloroformate was allowed to react with amino acids to give the corresponding 1-adamantyloxycarbonyl derivs. Several of them could be obtained in crystalline form, while the corresponding tert-butyloxycarbonyl derivs. have either not been reported or have been described as oils or amorphous solids. The adamantyloxycarbonylamino acids are cleaved by acid-catalyzed solvolysis with CF<sub>3</sub>CO<sub>2</sub>H to yield the free amino acids. Adamantyl chloroformate forms mixed carbonic-carboxylic anhydrides with



Et3N salts of N-protected amino acids which give peptide derivs. on reaction with amino acid esters.  
 IT 5854-52-4P, Formic acid, chloro-, 1-adamantyl ester  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



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FULL ESTIMATED COST          887.61      1066.18

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE              -129.60     -129.60
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FULL ESTIMATED COST          887.61      1066.18
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 DICTIONARY FILE UPDATES: 18 FEB 2008 HIGHEST RN 1004360-55-7

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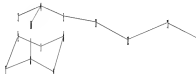
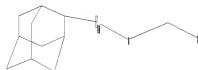
Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

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 on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

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exact bonds :
5-11 13-14

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Match level :

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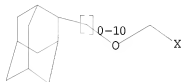
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L5 HAS NO ANSWERS

L5 STR



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100.0% PROCESSED 452 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

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PROJECTED ANSWERS: 0 TO 0

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14 ANSWERS

SEARCH TIME: 00.00.01

L7 14 SEA SSS FUL L5

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COST IN U.S. DOLLARS

SINCE FILE

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FULL ESTIMATED COST

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

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CA SUBSCRIBER PRICE

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=> 17

L8 68 L7

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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CA SUBSCRIBER PRICE	0.00	-129.60

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DICTIONARY FILE UPDATES: 18 FEB 2008 HIGHEST RN 1004360-55-7

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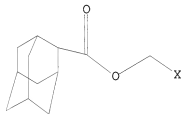


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ring bonds :
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L9 STRUCTURE UPLOADED

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L9 HAS NO ANSWERS
L9 STR
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Structure attributes must be viewed using STN Express query preparation.

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SEARCH TIME: 00.00.01
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10540547.trn

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 BATCH \*\*COMPLETE\*\*  
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 PROJECTED ANSWERS: 0 TO 0

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 FULL SEARCH INITIATED 16:50:57 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 1239 TO ITERATE

100.0% PROCESSED 1239 ITERATIONS 2 ANSWERS  
 SEARCH TIME: 00.00.01

L11 2 SEA SSS FUL L9

=> file reg			
COST IN U.S. DOLLARS	SINCE FILE	TOTAL	
	ENTRY	SESSION	
FULL ESTIMATED COST	178.36	1423.38	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)			
	SINCE FILE	TOTAL	
	ENTRY	SESSION	
CA SUBSCRIBER PRICE	0.00	-129.60	

FILE 'REGISTRY' ENTERED AT 16:51:00 ON 19 FEB 2008  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
 provided by InfoChem.

STRUCTURE FILE UPDATES: 18 FEB 2008 HIGHEST RN 1004360-55-7  
 DICTIONARY FILE UPDATES: 18 FEB 2008 HIGHEST RN 1004360-55-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
 predicted properties as well as tags indicating availability of  
 experimental property data in the original document. For information  
 on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=> l7 not l11  
 L12 12 L7 NOT L11

=> d ibib abs hitstr 1-12  
 'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'  
 'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'  
 'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

```

REG      - RN
SAM      - Index Name, MF, and structure - no RN
FIDE     - All substance data, except sequence data
IDE      - FIDE, but only 50 names
SQIDE    - IDE, plus sequence data
SQIDE3   - Same as SQIDE, but 3-letter amino acid codes are used
SQD      - Protein sequence data, includes RN
SQD3     - Same as SQD, but 3-letter amino acid codes are used
SQN      - Protein sequence name information, includes RN

CALC     - Table of calculated properties
EPROP    - Table of experimental properties
PROP     - EPROP and CALC

```

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

```

ABS  -- Abstract
APPS -- Application and Priority Information
BIB  -- CA Accession Number, plus Bibliographic Data
CAN  -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND  -- Index Data
IPC  -- International Patent Classification
PATS -- PI, SO
STD  -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

```

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

```

HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):ibib abs hitstr

```

'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'  
'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'  
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

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ISTD -- STD format, indented

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OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations  
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For additional information, please consult the following help messages:



```

HELP DFIELDs -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):ibib abs hitstr
'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

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OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

```

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The MAX format is the same as ALL.  
The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

```
HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):0
'0' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
```

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

```
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SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations
```

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

```
HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):exit
'EXIT' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
```

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

```
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ISTD -- STD format, indented

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OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations
```

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.  
The MAX format is the same as ALL.  
The IALL format is the same as ALL with BIB ABS and IND indented,

with text labels.

For additional information, please consult the following help messages:

```
HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):
ENTER DISPLAY FORMAT (IDE):scan
'SCAN' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
```

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

```
REG      - RN
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PROP     - EPROP and CALC
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BIB      -- CA Accession Number, plus Bibliographic Data
CAN      -- CA Accession Number
CBIB     -- CA Accession Number, plus Bibliographic Data (compressed)
IND      -- Index Data
IPC      -- International Patent Classification
PATS     -- PI, SO
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IABS     -- ABS, indented, with text labels
IBIB     -- BIB, indented, with text labels
ISTD     -- STD format, indented
```

```
OBIB     ----- AN, plus Bibliographic Data (original)
OIBIB    ----- OBIB, indented with text labels
```

```
SBIB     ----- BIB, no citations
SIBIB    ----- IBIB, no citations
```

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messages:

HELP DFIELDs -- To see a complete list of individual display fields.  
HELP FORMATS -- To see detailed descriptions of the predefined formats.  
ENTER DISPLAY FORMAT (IDE):rn

L12 ANSWER 1 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 1001199-75-2 REGISTRY

L12 ANSWER 2 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 869726-28-3 REGISTRY

L12 ANSWER 3 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 869726-26-1 REGISTRY

L12 ANSWER 4 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 720682-49-5 REGISTRY

L12 ANSWER 5 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 470701-80-5 REGISTRY

L12 ANSWER 6 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 177609-29-9 REGISTRY

L12 ANSWER 7 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 174972-29-3 REGISTRY

L12 ANSWER 8 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 174972-28-2 REGISTRY

L12 ANSWER 9 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 163798-91-2 REGISTRY

L12 ANSWER 10 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 97042-08-5 REGISTRY

L12 ANSWER 11 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 66258-27-3 REGISTRY

L12 ANSWER 12 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 53120-53-9 REGISTRY

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
3.80	1427.18

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-129.60

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 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE COVERS 1907 - 19 Feb 2008 VOL 148 ISS 8  
 FILE LAST UPDATED: 18 Feb 2008 (20080218/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

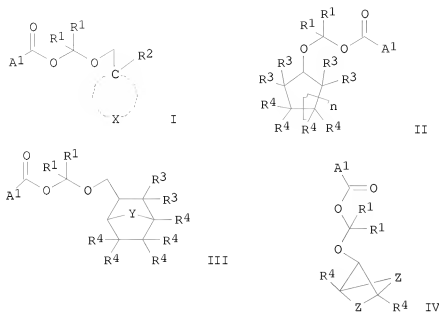
```
=> 17 not l11
      68 L7
      1 L11
L13      67 L7 NOT L11
```

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=> d ibib abs hitstr 1-67
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```
L13 ANSWER 1 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:39211 CAPLUS
DOCUMENT NUMBER: 148:145183
TITLE: Polymerizable ester compounds, polymers for resist
        compositions with good sensitivity and resolution
        Watanabe, Takeru; Kinsho, Takeshi; Hasegawa, Koji;
        Tachibana, Seiichiro; Ohashi, Masaki
INVENTOR(S): Shin-Etsu Chemical Co., Ltd., Japan
PATENT ASSIGNEE(S): U.S. Pat. Appl. Publ., 55pp.
SOURCE: CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
```

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2008008962	A1	20080110	US 2007-822444	20070705
JP 2008013662	A	20080124	JP 2006-186297	20060706
KR 2008005105	A	20080110	KR 2007-67507	20070705
PRIORITY APPLN. INFO.:			JP 2006-186297	A 20060706

GI



AB The present invention relates to polymerizable ester compds. I, II, III, and IV which undergo no acid-induced decomposition by  $\beta$ -elimination, wherein A1 = polymerizable functional group having a carbon-carbon double bond: R1 = H or C(R5)3; R2, R3 = alkyl; R4 = H or alkyl; R5 = monovalent hydrocarbon; X = alkylene; Y = methylene, ethylene or isopropylidene; Z = alkylene; and n = 1 or 2. Thus, 128 g 1-methylcyclohexylmethanol and 36 g paraformaldehyde were reacted and further reacted with methacrylic acid to give 1-methylcyclohexylmethyl methacrylate, 13.9 g of which was polymerized with 10.4 g 3-hydroxy-1-adamantyl methacrylate and 15.7 g 3-oxo-2-oxatricyclo[4.2.1.0<sup>4,8</sup>]nonan-9-yl methacrylate in the presence of 2,2-azobis(2-methylpropanoate) at 80° for 6 h to give a copolymer with Mw 9200 and polydispersity 2.10, 80 parts of which was mixed with triphenylsulfonium nonafluorobutanesulfonate 4.4, propylene glycol monomethyl ether acetate 560, cyclohexanone 240, and a sensitivity regulator, spin-coated onto an antireflective coating-coated silicon wafer, baked at 110° for 1 min, irradiated with an excimer laser, baked at 115° for 60 s, developed, and washed to give a pattern, showing maximum resolution 70 nm and proximity bias 42 nm.

IT 1001199-75-2P

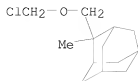
RL: IMF (Industrial manufacture); PRPH (Prophetic); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate in monomer preparation; preparation of polymerizable ester compds.,

polymers for resist compns. with good sensitivity and resolution)

RN 1001199-75-2 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-[(chloromethoxy)methyl]-2-methyl- (CA INDEX NAME)



L13 ANSWER 2 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:1469801 CAPLUS  
 DOCUMENT NUMBER: 148:109068  
 TITLE: Low-molecular-weight compound for positive resist composition and method for forming resist pattern  
 INVENTOR(S): Shiono, Daiju; Hirayama, Taku; Hada, Hideo  
 PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 59pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

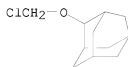
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007148456	A1	20071227	WO 2007-JP55661	20070320
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM JP 2008001604 A 20080110 JP 2006-169854 20060620 PRIORITY APPLN. INFO.: JP 2006-169854 A 20060620 GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Compound I (A = trivalent aromatic cyclic group, alkyl group, alicyclic group, or trivalent organic group having an aromatic cyclic group or alicyclic group; R11-R17 = Cl-10 alkyl or aromatic hydrocarbon group; g, j ≥ 1; k, q ≥ 0; g + j + k + q ≤ 5; b ≥ 1; l, m ≥ 0; b + l + m ≤ 4; c ≥ 1; n, o ≥ 0; c + n + o ≤ 4; Z = YCO2R; Y = alkylene, divalent aromatic hydrocarbon group, alicyclic group, divalent organic group having aromatic hydrocarbon group or alicyclic group; R = acid-cleavable dissoln.-inhibiting group) is usable for resist compns. for



forming patterns with reduced line edge roughness (LER).  
 IT 177609-29-9, 2-Chloromethoxyadamantane  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of low-mol.-weight compds. for pos. resist compns. for forming  
 resist patterns with reduced line edge roughness)  
 RN 177609-29-9 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)

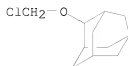


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:1059983 CAPLUS  
 DOCUMENT NUMBER: 147:374547  
 TITLE: Positive-working resist composition containing acrylic  
 polymer having acetal-type acid decomposable  
 solubility suppressing group and method of patterning  
 resist  
 INVENTOR(S): Kinoshita, Yohei; Furuya, Sanae; Iwai, Takeshi;  
 Haneda, Hideo  
 PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 48pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007240718	A	20070920	JP 2006-60930	20060307
PRIORITY APPLN. INFO.:			JP 2006-60930	20060307

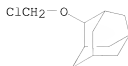
AB Disclosed is a pos.-working resist composition comprising a resin component  
 capable of increasing alkali solubility upon interaction with an acid, and an  
 acid generating agent, wherein the resin component is acrylic polymer  
 having acetal-type acid decomposable solubility-suppressing group represented  
 by [CH<sub>2</sub>-CR(COO-(CH<sub>2</sub>)c-Y1{(CH<sub>2</sub>)e-OZ}a{(CH<sub>2</sub>)d-OH)b)] (R = H, halo, lower  
 alkyl, etc.; Y1 = aliphatic cyclyl; Z = acid-decomposable  
 solubility-suppressing  
 group; a = 1-3; b = 0-2; a + b = 1-3; and c, d, and e = 0-3).  
 IT 177609-29-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of acrylic resin component having having acetal-type acid  
 decomposable solubility-suppressing group)  
 RN 177609-29-9 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



L13 ANSWER 4 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:935060 CAPLUS  
 DOCUMENT NUMBER: 147:288278  
 TITLE: Preparation of adamantane based molecular glass photoresists for sub-200 nm immersion lithography  
 INVENTOR(S): Tanaka, Shinji; Ober, Christopher K.  
 PATENT ASSIGNEE(S): Cornell Research Foundation, Inc., USA; Idemitsu Kosan Co., Ltd.  
 SOURCE: PCT Int. Appl., 41pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007094784	A1	20070823	WO 2006-US5378	20060216
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: WO 2006-US5378 20060216  
 AB Disclosed are glass photoresists generated from adamantane derivs. containing acetal and/or ester moieties as novel high-performance photoresist materials. Some of the disclosed adamantane-based glass resists have a tripodal structure and other disclosed adamantane-based glass resists include one or more cholic groups. The disclosed adamantane derivs. can be synthesized from starting materials which are com. available. By way of example only, one of many disclosed amorphous glass photoresists has the following structure: GR-5 Adamantane-1,3,5-triyltris(oxyethylene) tricholate.  
 IT 177609-29-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of adamantane based mol. glass photoresist for immersion lithog.)  
 RN 177609-29-9 CAPLUS  
 CN Tricyclo[3.3.1.1,3,7]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:768324 CAPLUS

DOCUMENT NUMBER: 147:277005

TITLE: Rate and product studies with 2-adamantyl fluoroformate under solvolytic conditions

AUTHOR(S): Kyong, Jin Burm; Rhu, Chan Joo; Kim, Yong-Gun; Kevill, Dennis N.

CORPORATE SOURCE: Department of Chemistry and Applied Chemistry, Hanyang University, Gyeonggi-do, 426-791, S. Korea

SOURCE: Journal of Physical Organic Chemistry (2007), 20(7), 525-531

CODEN: JPOCEE; ISSN: 0894-3230

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The specific rates of solvolysis of 2-adamantyl fluoroformate have been measured at 25.0 °C in 20 pure and binary solvents. These are well correlated using the extended Grunwald-Winstein equation, with incorporation of the NT solvent nucleophilicity scale and the YCl solvent ionizing power scale. The sensitivities ( $\rho = 2.15 \pm 0.17$  and  $m = 0.95 \pm 0.07$ ) toward the changes in solvent nucleophilicity and solvent ionizing power, and the  $k_F/k_{Cl}$  values are very similar to those previously observed for solvolyses of n-octyl fluoroformate, consistent with the addition step of an addition-elimination pathway being rate-determining For aqueous

ethanol, measurement of the product ratio allowed selectivity values (S) to be determined The results are compared with those reported earlier for 2-adamantyl chloroformate and mechanistic conclusions are drawn.

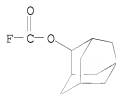
IT 163798-91-2, 2-Adamantyl fluoroformate

RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)

(rate and product studies with 2-adamantyl fluoroformate under solvolytic conditions)

RN 163798-91-2 CAPLUS

CN Carbonofluoridic acid, tricyclo[3.3.1.1.3]dec-2-yl ester (CA INDEX NAME)

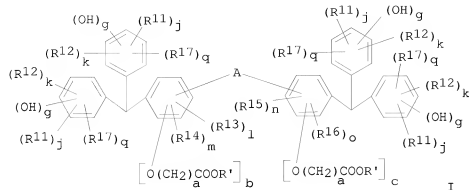


REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS

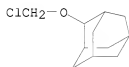
## RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:350618 CAPLUS  
 DOCUMENT NUMBER: 146:368733  
 TITLE: Resist compounds, their production method, positive  
 resist compositions and method for forming resist  
 patterns  
 INVENTOR(S): Shiono, Daiju; Dazai, Takahiro; Hirayama, Taku; Kasai,  
 Kohei; Hada, Hideo  
 PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 81pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007034719	A1	20070329	WO 2006-JP318151	20060913
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2007112777	A	20070510	JP 2005-320551	20051104
JP 2008019235	A	20080131	JP 2006-239982	20060905
PRIORITY APPLN. INFO.:			JP 2005-271760	A 20050920
			JP 2005-320550	A 20051104
			JP 2005-320551	A 20051104
			JP 2006-76270	A 20060320
			JP 2006-167263	A 20060616
			JP 2006-239982	A 20060905
OTHER SOURCE(S):		MARPAT 146:368733		
GI				



- AB The resist comps. contain compds. I (A = Q; CH<sub>2</sub>, alicyclic group; R' = H, acid-cleavable dissoln. inhibiting group, where ≥1 of R' being an acid-cleavable dissoln. inhibiting group; R11-R19 = C1-10 alkyl or an aromatic hydrocarbon group and may include a heteroatom in the structure; g, j ≥ 1; k, q ≥ 0; g + j + k + q ≤ 5; a = 1-3; b ≥ 1; l, m ≥ 0; b + l + m ≤ 4; c ≥ 1; n, o ≥ 0; c + n + o ≤ 4; r, y, z ≥ 0; r + y + z ≤ 4). The resist comps. can form high-resol. resist patterns with improved line edge roughness (LER) by electron beam lithog. and extreme UV (EUV) lithog.
- IT 177609-29-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (pos. resist comps. for forming high-resol. resist patterns)
- RN 177609-29-9 CAPLUS
- CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:93733 CAPLUS  
 DOCUMENT NUMBER: 147:344702  
 TITLE: Thermolysis of polymethacrylates for 193 nm resist  
 AUTHOR(S): Ogata, Toshiyuki; Kasai, Kohei; Matsumaru, Shogo; Takahashi, Motoki; Hada, Hideo; Shirai, Masamitsu  
 CORPORATE SOURCE: Tokyo Ohka Kogyo Co., Ltd., 1590 Tabata, Samukawa-machi, Koza-gun, Kanagawa, 253-0114, Japan  
 SOURCE: Journal of Photopolymer Science and Technology (2006), 19(6), 705-708  
 CODEN: JSTEWE; ISSN: 0914-9244  
 PUBLISHER: Technical Association of Photopolymers, Japan  
 DOCUMENT TYPE: Journal

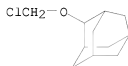
LANGUAGE: English

AB Thermal desorption spectroscopic results of thermal degradation of 2-adamantylloxymethyl methacrylate- $\gamma$ -butyrolactone methacrylate copolymer and 2-methyl-2-adamantyl methacrylate- $\gamma$ -butyrolactone methacrylate copolymer films showed the thermal stability of each protecting group such as 2-adamantyl oxymethyl ester and 2-methyl-2-adamantyl ester, and is in good agreement with TGA results. The stereoregularity of these polymers affected thermal degradation process (deesterification and dehydration) of the polymer film.

IT 177609-29-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction with methacrylic acid)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1228843 CAPLUS

DOCUMENT NUMBER: 145:513854

TITLE: Positive resist composition and method of forming resist pattern

INVENTOR(S): Kinoshita, Yohei; Irie, Makiko; Ohkubo, Waki; Nakagawa, Yusuke; Hidesaka, Shinichi

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 49pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

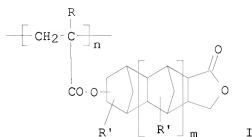
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006123487	A1	20061123	WO 2006-JP307486	20060407
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006323181	A	20061130	JP 2005-146859	20050519

PRIORITY APPLN. INFO.:  
GI

JP 2005-146859

A 20050519



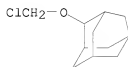
AB The resist composition can form a resist pattern of a satisfactory shape. The resist composition is obtained by dissolving in an organic solvent a resin ingredient (A) whose alkali solubility increases by the action of an acid and an acid generator ingredient (B) which generates an acid upon irradiation with a radiation, wherein the resin ingredient (A) comprises a copolymer bearing a constituent unit having an acetal-type protective group, a constituent unit I ( $R = H, F$ , lower alkyl, lower fluoroalkyl;  $R' = H$ , lower alkyl, C1-5 alkoxy;  $m = 0, 1$ ) derived from an acrylic ester having a lactone-containing polycyclic group, and a constituent unit derived from an acrylic ester having a polar-group-containing aliphatic hydrocarbon group.

IT 177609-29-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(pos.-working resist compns. and method for resist pattern formation)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 9 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1226563 CAPLUS

DOCUMENT NUMBER: 145:513852

TITLE: Positive-working resist composition and method for resist pattern formation

INVENTOR(S): Kinoshita, Yohei; Ohkubo, Waki; Nakagawa, Yusuke;

Hidesaka, Shinichi; Irie, Makiko

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 53pp.

CODEN: PIXXD2

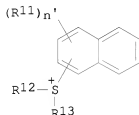
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006123496	A1	20061123	WO 2006-JP308124	20060418
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006322989	A	20061130	JP 2005-143969	20050517
EP 1882981	A1	20080130	EP 2006-732052	20060418
R: DE				
KR 2007118708	A	20071217	KR 2007-727126	20071121
PRIORITY APPLN. INFO.:			JP 2005-143969	A 20050517
			WO 2006-JP308124	W 20060418
OTHER SOURCE(S):	MARPAT 145:513852			
GI				



I

AB This invention provides a pos.-working resist composition containing a resin component (A) and an acid generating agent component (B), which, upon a change in exposure, causes no significant variation in pattern size, and a method for resist pattern formation using this resist composition. Component (A) comprises a polymer comprising constitutional units containing an acetal-type protective group, acrylic ester-derived constitutional units containing a lactone-containing cyclic group, and acrylic ester-derived constitutional units containing a polar group-containing aliphatic hydrocarbon group.

Component (B) comprises an onium salt-type acid generating agent having a cation part I [R11 = alkyl, alkoxy, halo, hydroxy; R12, R13 = (un)substituted aryl or alkyl; n' = 1-3].

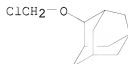
IT 177609-29-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(pos.-working resist compns. and method for resist pattern formation)



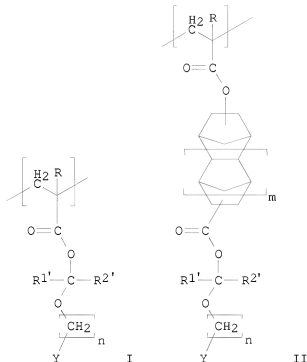
RN 177609-29-9 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 10 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:845377 CAPLUS  
 DOCUMENT NUMBER: 145:281061  
 TITLE: Positive resist composition and method of forming resist pattern  
 INVENTOR(S): Kinoshita, Yohei; Hirano, Isao  
 PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 63pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006087865	A1	20060824	WO 2005-JP22878	20051213
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM JP 2006227160 A 20060831 JP 2005-38944 20050216 PRIORITY APPLN. INFO.: JP 2005-38944 A 20050216 OTHER SOURCE(S): MARPAT 145:281061 GI				



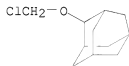
AB The invention relates to a pos. resist composition which comprises a resin ingredient (A) which comes to have enhanced alkali solubility by the action of an acid and an acid generator ingredient (B) which generates an acid upon irradiation with a radiation, wherein the ingredient (A) comprises a structural unit (a1) represented by the general formula I or II, a structural unit (a2) derived from an acrylic ester having a lactone-containing monocyclic or polycyclic group, and a structural unit (a3) which is a structural unit other than the structural units (a1) and (a2) and is derived from an acrylic ester which contains a non-acid-dissociable dissoln.-inhibitive group having an alicyclic group and contains no polar groups, and the ingredient (B) comprises an onium salt (B1) having an anion moiety represented by the formula R41-SO<sub>3</sub> -.

IT 177609-29-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(resin in pos. resist composition)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:734536 CAPLUS  
 DOCUMENT NUMBER: 145:177268  
 TITLE: Positive resist composition and method for forming  
 resist pattern  
 INVENTOR(S): Kinoshita, Yohei  
 PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 65 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006077705	A1	20060727	WO 2005-JP23154	20051216
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, KE, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006201239	A	20060803	JP 2005-10051	20050118
JP 2006201402	A	20060803	JP 2005-12053	20050119
PRIORITY APPLN. INFO.:			JP 2005-10051	A 20050118
			JP 2005-12053	A 20050119
OTHER SOURCE(S):		MARPAT 145:177268		
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Disclosed is a pos. resist composition having high resolution which enables to improve DOF. This composition contains a resin component (A) whose alkali solubility is increased by the action of an acid and an acid generator component (B) which generates an acid when exposed to light. The resin component (A) has at least one constitutional unit (a1) selected from those represented by the general formula I and the general formula II, and the acid generator component (B) is composed of an onium salt acid generator (B1) having a cation component represented by the general formula III or an onium salt acid generator (B4) having an anion component represented by the general formula IV or -N(-SO2-Y")(-SO2-Z"). In the formulas below, Y represents an alicyclic group; n represents 0 or an integer of 1-3; m represents 0 or 1; R represents a hydrogen atom, a lower alkyl group, a fluorine atom or a fluorinated lower alkyl group; R1 and R2 resp. represent a hydrogen atom or a lower alkyl group; R11 represents an alkyl group, an alkoxy group, a halogen atom or a hydroxyl group; R12 and

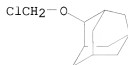
R13 resp. represent an aryl group of an alkyl group; and n' represents 0 or an integer of 1-3; X" represents F-substituted C2-6 alkylene; Y" and Z" represent F-substituted C1-10 alkyl.

IT 177609-29-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(pos. resist composition)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 12 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:601730 CAPLUS

DOCUMENT NUMBER: 145:92960

TITLE: Polymer compound, positive resist composition and method for forming resist pattern

INVENTOR(S): Kinoshita, Yohei; Kurimoto, Yuko; Iwai, Takeshi

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

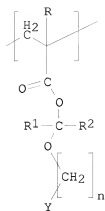
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

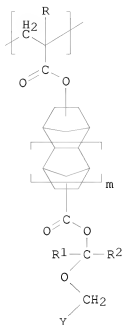
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006064626	A1	20060622	WO 2005-JP21146	20051117
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
JP 2006169319	A	20060629	JP 2004-361399	20041214
PRIORITY APPLN. INFO.:			JP 2004-361399	A 20041214
GI				



I



II

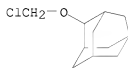
AB The disclosed polymer has constitutional units I and II (Y = alicyclic group; n = 0, 1-3; m = 0, 1; R = H, C1-5 fluoroalkyl; R1, R2 = H, C1-5 alkyl). The polymer may also contain acrylate units with lactone-containing mono- or poly-cyclic ring and or acrylate units with polar hydrocarbyl group which does not dissociate by an acid. The disclosed photoresists contains the above polymer and a photoacid generator. The resist shows high resolution and high pattern quality.

IT 177609-29-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(esterification with methacrylic acid in preparation of polymer for photoresists)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

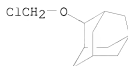
ACCESSION NUMBER: 2006:410214 CAPLUS

DOCUMENT NUMBER: 144:422710

TITLE: Photoacid generation type photoresist component with

INVENTOR(S): acid-cleavable dissolution inhibiting groups  
Shiono, Daiju; Hirayama, Taku; Ogata, Toshiyuki; Hada,  
Hideo  
PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 58 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006046383	A1	20060504	WO 2005-JP18143	20050930
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, KE, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
JP 2006267996	A	20061005	JP 2005-212904	20050722
EP 1806619	A1	20070711	EP 2005-788289	20050930
R: BE, DE, FR				
KR 2007084080	A	20070824	KR 2007-710473	20070508
PRIORITY APPLN. INFO.:			JP 2004-315601	A 20041029
			JP 2004-378248	A 20041227
			JP 2005-50722	A 20050225
			JP 2005-212904	A 20050722
			WO 2005-JP18143	W 20050930
AB Disclosed is a resist composition containing a compound obtained by substituting a part or all of hydrogen atoms in the phenolic hydroxyl groups of a polyvalent phenolic compound (a) which has two or more phenolic hydroxyl groups and a mol. weight of 300-2500 with at least one group selected from the group consisting of acid-cleavable dissoln. inhibiting groups represented by the general formulas $-(CH_2)n'CO_2R_1$ or $-CHR_3OR_2$ below (wherein R1 and R2 independently represent a branched or cyclic alkyl group which may contain a heteroatom, R3 represents a hydrogen atom or a lower alkyl group, and n' represents an integer of 1-3).				
IT 177609-29-9P				
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
(reactant of photoacid generation type photoresist component with acid-cleavable dissoln. inhibiting groups)				
RN 177609-29-9 CAPLUS				
CN Tricyclo[3.3.1.1.3,7]decane, 2-(chloromethoxy)- (CA INDEX NAME)				



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 14 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:366907 CAPLUS  
 DOCUMENT NUMBER: 144:422694  
 TITLE: Positive photoresist composition for immersion exposure and method of forming resist pattern  
 INVENTOR(S): Ogata, Toshiyuki; Tsuji, Hiromitsu; Matsumaru, Syogo; Hada, Hideo  
 PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 59 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006040949	A1	20060420	WO 2005-JP18138	20050930
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM JP 2006113140 A 20060427 JP 2004-297945 20041012 KR 2007061862 A 20070614 KR 2007-708172 20070410 PRIORITY APPLN. INFO.: JP 2004-297945 A 20041012 WO 2005-JP18138 W 20050930				

AB The invention relates to a pos. resist composition for immersion exposure which comprises a resin ingredient (A) which comes to have enhanced alkali solubility by the action of an acid and an acid generator ingredient (B) which generates an acid upon exposure to light, characterized in that the resin ingredient (A) comprises a resin (Al) which has alkali-soluble groups (i) having a hydrogen atom and in which the hydrogen atom of part of the alkali-soluble groups (i) has been replaced with an acid-dissociable dissoln.-inhibitive group (I) represented by the following general formula -C(R1)(R2)-O-(-CH2)n-Z [wherein Z represents an alicyclic group; n is an integer of 0-3; and R1 and R2 each independently represents hydrogen or Cl-5 alkyl]. Composition provides high resolution patterns of good profile.

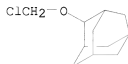
IT 177609-29-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(resin in pos. photoresist composition)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 15 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1354495 CAPLUS

DOCUMENT NUMBER: 144:97681

TITLE: Monomers for polymer compound, positive resist  
composition and method for forming resist pattern

INVENTOR(S): Ogata, Toshiyuki; Matsumaru, Syogo; Hada, Hideo

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: PCI Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005123655	A1	20051229	WO 2005-JP11067	20050616
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

JP 2006001907

A

20060105

JP 2004-182299

20040621

PRIORITY APPLN. INFO.:

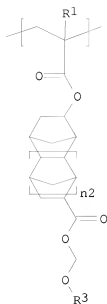
JP 2004-182299

A 20040621

OTHER SOURCE(S): MARPAT 144:97681

GI





I

AB Disclosed is a pos. resist composition with excellent resolution which enables  
to

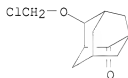
form a good resist pattern even when there is used an acid generator which generates a weak acid. Such a pos. resist composition contains a polymer compound having a constitutional unit (a1) represented by the general formula I and an acid generator component (B) which generates an acid when exposed to light. In the formula, R1 represents a hydrogen atom or a lower alkyl group; R3 represents an alkyl group having 1-15 carbon atoms or an alicyclic group, and may have one or more substituents selected from the group consisting of ether bonds, hydroxyl group, carbonyl groups, ester groups and amino group; and n2 represents 0 or an integer of 1-3.

IT 720682-49-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(compound, polymer compound, pos. resist composition and method for forming resist pattern)

RN 720682-49-5 CAPLUS

CN Tricyclo[3.3.1.1.3]decanone, 4-(chloromethoxy)- (9CI) (CA INDEX NAME)

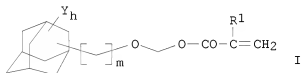


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 16 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1241028 CAPLUS  
 DOCUMENT NUMBER: 143:485833  
 TITLE: Adamantane derivative, method for producing same and photosensitive material for photoresist  
 INVENTOR(S): Ito, Katsuki; Ono, Hidetoshi; Tanaka, Shinji; Hatakeyama, Naoyoshi; Miyamoto, Shinji; Matsumoto, Nobuaki  
 PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005111097	A1	20051124	WO 2005-JP8943	20050517
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MN, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			JP 2004-147946	A 20040518
OTHER SOURCE(S):			MARPAT 143:485833	
GI				



AB Disclosed is an adamantane derivative which is useful as a monomer for a functional resin such as a photosensitive resin that is used in the fields of photolithog. Also disclosed are a method for efficiently producing such an adamantane derivative and a photosensitive material for photoresists containing a polymer obtained from such an adamantane derivative. Specifically disclosed is an adamantane derivative which is characterized by having a structure represented by the following general formula I wherein R1 represents a hydrogen atom, a Me group or a trifluoromethyl group; Y represents an alkyl group having 1-10 carbon atoms, a halogen atom or a hydroxyl group, or alternatively two Ys may combine together to form =O, and a plurality of Ys may be the same as or different from one another; k represents an integer of 0-15; and m represents 0 or 1. Also specifically disclosed are a method for producing an adamantane derivative represented by the above general formula (I) which is characterized by reacting a

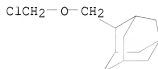
halomethyl adamantyl (methyl) ether with a (meth)acrylic acid or an acid anhydride thereof, and a photosensitive material for photoresists containing a polymer obtained from such an adamantane derivative

IT 869726-26-1 869726-28-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(adamantane derivative for photoresist composition)

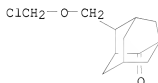
RN 869726-26-1 CAPLUS

CN Tricyclo[3.3.1.1.3,7]decane, 2-[(chloromethoxy)methyl]- (CA INDEX NAME)



RN 869726-28-3 CAPLUS

CN Tricyclo[3.3.1.1.3,7]decanone, 4-[(chloromethoxy)methyl]- (9CI) (CA INDEX NAME)

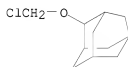


IT 177609-29-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(adamantane derivative for photoresist composition)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1.3,7]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 17 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:962319 CAPLUS

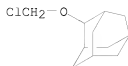
DOCUMENT NUMBER: 143:257069

TITLE: Polymer compound, photoresist composition containing such polymer compound, and method for forming resist pattern

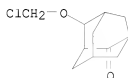
INVENTOR(S): Ogata, Toshiyuki; Matsumaru, Syogo; Kinoshita, Yohei; Hada, Hideo; Shiono, Daiju; Shimizu, Hiroaki; Kubota, Naotaka

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 91 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005080473	A1	20050901	WO 2005-JP1228	20050128
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
JP 2006096965	A	20060413	JP 2004-316960	20041029
EP 1717261	A1	20061102	EP 2005-709454	20050128
R: DE, FR				
CN 1918217	A	20070221	CN 2005-80004964	20050128
PRIORITY APPLN. INFO.:			JP 2004-45522	A 20040220
			JP 2004-134585	A 20040428
			JP 2004-179475	A 20040617
			JP 2004-252474	A 20040831
			JP 2004-316960	A 20041029
			WO 2005-JP1228	W 20050128
AB	Disclosed is a polymer compound which enables to obtain a highly sensitive photoresist composition which forms a fine pattern with excellent resolution and good rectangular shape and is capable of obtaining good resist characteristics even when the acid generated by an acid generator is weak. Also disclosed are a photoresist composition using such a polymer compound and a method for forming a resist pattern using such a photoresist composition. The photoresist composition and resist pattern-forming method use a polymer compound having an alkali-soluble group (i) which is at least one substituent selected from an alc. hydroxyl group, a carboxyl group and a phenolic hydroxyl group and protected by an acid-cleavable dissoln. inhibiting group (ii) represented by general formula -CH <sub>2</sub> -O-(-CH <sub>2</sub> ) <sub>n</sub> -R <sub>1</sub> wherein R <sub>1</sub> represents an alicyclic group having 20 or less carbon atoms which may have an oxygen, nitrogen, sulfur or halogen atom; and n represents 0 or an integer of 1-5.			
IT	177609-29-9P 720682-49-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (polymer compound, photoresist composition containing such polymer compound, and method for forming resist pattern)			
RN	177609-29-9 CAPLUS			
CN	Tricyclo[3.3.1.1 <sup>3,7</sup> ]decane, 2-(chloromethoxy)- (CA INDEX NAME)			



RN 720682-49-5 CAPLUS  
 CN Tricyclo[3.3.1.1.3,7]decanone, 4-(chloromethoxy)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 18 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:284341 CAPLUS

DOCUMENT NUMBER: 143:132933

TITLE: Application of the extended Grunwald-Winstein equation to solvolyses of n-propyl chloroformate

AUTHOR(S): Kyong, Jin Burm; Won, Hoshik; Kevill, Dennis N.

CORPORATE SOURCE: Department of Chemistry, Hanyang University, Kyunggi-Do, 425-791, S. Korea

SOURCE: International Journal of Molecular Sciences (2005), 6(1-2), 87-96

CODEN: IJMCFK; ISSN: 1422-0067

URL: <http://www.mdpi.org/ijms/papers/i6010087.pdf>

PUBLISHER: Molecular Diversity Preservation International

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB Application of the extended Grunwald-Winstein equation to solvolyses of Pr chloroformate in a variety of pure and binary solvents indicates an addition-elimination pathway in the majority of the solvents but an ionization pathway in the solvents of highest ionizing power and lowest nucleophilicity. For methanolysis, a solvent deuterium isotope effect of 2.17 is compatible with the incorporation of general-base catalysis into the substitution process. Activation parameters are consistent with the duality of mechanism. Very modest pos. salt effects are observed on adding chloride or bromide salts to the ethanolysis.

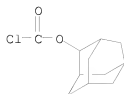
IT 53120-53-9, 2-Adamantyl chloroformate

RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)

(application of the extended Grunwald-Winstein equation to the solvolysis of alkyl chloroformates)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 19 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:725585 CAPLUS

DOCUMENT NUMBER: 141:379887

TITLE: 5-(Tryptophylamino)-1,3-dioxoperhydropyrido[1,2-c]pyrimidine-based cholecystokinin receptor antagonists: reversal of CCK1 receptor subtype selectivity toward CCK2 receptors

AUTHOR(S): Munoz-Ruiz, Pilar; Garcia-Lopez, M. Teresa; Cenarruzabeitia, Edurne; Del Rio, Joaquin; Dufresne, Marlene; Foucaud, Magali; Fourmy, Daniel; Herranz, Rosario

CORPORATE SOURCE: Instituto de Quimica Medica, CSIC, Madrid, E-28006, Spain

SOURCE: Journal of Medicinal Chemistry (2004), 47(21), 5318-5329

CODEN: JMCMAR; ISSN: 0022-2623

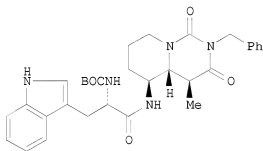
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:379887

GI

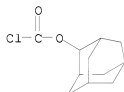


I

AB With the aim of reversing selectivity or antagonist/agonist functionality in the 5-(tryptophylamino)-1,3-dioxoperhydropyrido[1,2-c]pyrimidine-derived potent and highly selective CCK1 antagonists, a series of 4-benzyl and 4-Me derivs. were prepared Whereas the introduction of the benzyl group led, in all cases, to complete loss of the binding affinity, the incorporation of the Me group gave a different result depending on the stereochem. of the 1,3-dioxoperhydropyrido[1,2-c]pyrimidine scaffold.

Thus, the introduction of the Me group into the (4aS,5R)-diastereoisomers, giving a (4S)-configuration, produced a 3-fold increase in the CCK1 binding potency and selectivity. However, the same structural manipulation in the opposite (4aR,5S)-stereochem., leading to a (4R,4aR,5S)-configuration, produced reversal of the selectivity for CCK1 to the CCK2 receptors. The replacement of the Boc group at the tryptophan moiety by a 2-adamantyloxycarbonyl group also contributed to that reversal. The resulting compds. displayed moderate CCK2 antagonist activity in rat and human receptors, and a very small partial agonist effect on the production of inositol phosphate in COS-7 cells transfected with the wild-type human CCK2 receptor. An example compound thus prepared was [(1S)-1-(1H-indol-3-ylmethyl)-2-[[[(4S,4aR,5S)-octahydro-1,3-dioxo-2-(phenylmethyl)-1H-pyrido[1,2-c]pyrimidin-5-yl]amino]-2-oxoethyl]carbamate 1,1-dimethylethyl ester (I).

IT 53120-53-9P, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of [(adamantyl)tryptophyl]amino)methyl(phenylmethyl)dioxoperhydropyrido[1,2-c]pyrimidine derivative using adamantyl chloroformate as synthetic intermediate)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)

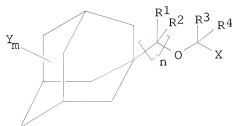


REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

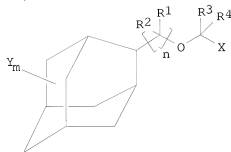
L13 ANSWER 20 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:565183 CAPLUS  
 DOCUMENT NUMBER: 141:107948  
 TITLE: Adamantane derivatives and process for producing them  
 INVENTOR(S): Tanaka, Shinji; Ono, Hidetoshi; Kodoi, Kouichi; Hatakeyama, Naoyoshi  
 PATENT ASSIGNEE(S): Idemitsu Petrochemical Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004058675	A1	20040715	WO 2003-JP16258	20031218
W: KR, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
JP 2004217627	A	20040805	JP 2003-414445	20031212

EP 1577285 A1 20050921 EP 2003-780891 20031218  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK  
 US 2006149073 A1 20060706 US 2005-540547 20051213  
 PRIORITY APPLN. INFO.: JP 2002-374659 A 20021225  
 WO 2003-JP16258 W 20031218  
 OTHER SOURCE(S): MARPAT 141:107948  
 GI



I



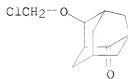
II

AB Compds. I and II (R1-R4 = H, halo, C1-10 alkyl, C1-10 haloalkyl; X = halo; Y = C1-10 alkyl, C1-10 haloalkyl, halo, heteroatom-containing group; m = 0-15; n = 0-10; wherein in I, the case where both of m and n are 0 and both of R3 and R4 are H is excluded; in I and II, two Y groups may form :O group), such as chloromethyl adamantylmethyl ether and chloromethyl 4-oxo-2-adamantyl ether, are prepared. The adamantane derivs. are useful as modifiers for photoresist resins in the field of photolithog., dry-etching resistance improvers, intermediates for agricultural chems. and medicines, and other various industrial products.

IT 720682-49-5P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of adamantane derivs.)

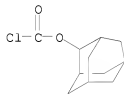
RN 720682-49-5 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decanone, 4-(chloromethoxy)- (9CI) (CA INDEX NAME)





L13 ANSWER 21 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:242747 CAPLUS  
 DOCUMENT NUMBER: 138:384966  
 TITLE: Solvolysis-Decomposition of 2-Adamantyl Chloroformate:  
 Evidence for Two Reaction Pathways  
 AUTHOR(S): Kyong, Jin Burm; Yoo, Jung-Suk; Kevill, Dennis N.  
 CORPORATE SOURCE: Department of Chemistry, Hanyang University, Ansan,  
 Kyunggi-do, 425-791, S. Korea  
 SOURCE: Journal of Organic Chemistry (2003), 68(9), 3425-3432  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Reaction of 2-adamantyl chloroformate under a variety of solvolytic  
 conditions leads to 2-adamantyl chloride accompanied by solvolysis  
 products, some with and some without retention of the CO<sub>2</sub> unit. For  
 example, in 100% ethanol, only 4.8% 2-adamantyl chloride is formed with  
 the mixed carbonate (88%) being the dominant product, and in 100%  
 2,2,2-trifluoroethanol, the products are both formed with loss of CO<sub>2</sub>, 59%  
 of the chloride and 41% of the ether. With exclusion of the specific  
 rates in 100% and 90% ethanol and methanol, a good Grunwald-Winstein plot  
 against YCl values (solvent ionizing power) is obtained, with a slope of  
 0.47 ± 0.03. The results are compared with those reported earlier for  
 1-adamantyl chloroformate and iso-Pr chloroformate and mechanistic  
 conclusions are drawn.  
 IT 53120-53-9, 2-Adamantyl Chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (solvolysis-decomposition of adamantyl chloroformate)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 22 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:793943 CAPLUS  
 DOCUMENT NUMBER: 137:317924  
 TITLE: Perfluoroalkylsulfonic acid compounds for photoresists  
 INVENTOR(S): Ferreira, Lawrence; Blakeney, Andrew J.; Spaziano,  
 Gregory Dominic; Dimov, Ognian; Kocab, Thomas J.;  
 Hatfield, John P.  
 PATENT ASSIGNEE(S): Arch Specialty Chemicals, Inc., USA  
 SOURCE: PCT Int. Appl., 81 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002082185	A1	20021017	WO 2002-US10800	20020405
W: JP, KR, SG				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US 2002197558	A1	20021226	US 2002-117693	20020405
US 6855476	B2	20050215		
EP 1299774	A1	20030409	EP 2002-725542	20020405
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
JP 2004519520	T	20040702	JP 2002-579891	20020405
TW 275905	B	20070311	TW 2002-91106973	20020408
PRIORITY APPLN. INFO.:			US 2001-281652P	P 20010405
			WO 2002-US10800	W 20020405

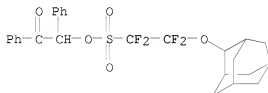
OTHER SOURCE(S): MARPAT 137:317924

AB The present invention relates to a photoacid compound that produce a fluorinated alkyl sulfonic acid having a short perfluoroalkyl chain attached to an ether linkage. The invention photoacid has general structure: R-O(CF<sub>2</sub>)<sub>n</sub>SO<sub>3</sub>X (n = 1-4; R = C<sub>1</sub>-C<sub>12</sub> alkyl or alkenyl, aralkyl, aryl, bicycloalkyl, tricycloalkyl, H, alkyl sulfonic acid, perfluoroalkyl, general structure F((CF<sub>2</sub>)<sub>p</sub>O)<sub>m</sub>(CF<sub>2</sub>)<sub>q</sub>; p = 1-4; m = 0-3; q = 1-4; etc.; X = organic cations and covalently bonded organic radicals). The present invention relates photoresist compn comprising such photoacid generator compound

IT 470701-80-5  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (photoacid for photoresists composition and photolithog.)

RN 470701-80-5 CAPLUS

CN Ethanesulfonic acid, 1,1,2,2-tetrafluoro-2-(tricyclo[3.3.1.1.3,7]dec-2-yloxy)-, 2-oxo-1,2-diphenylethyl ester (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 23 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:643335 CAPLUS

DOCUMENT NUMBER: 132:8706

TITLE: 5-(Tryptophyl)amino-1,3-dioxoperhydropyrido[1,2-c]pyrimidine-Based Potent and Selective CCK1 Receptor Antagonists: Structural Modifications at the Tryptophan Domain

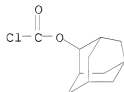
AUTHOR(S): Bartolome-Nebreda, Jose M.; Gomez-Monterrey, Isabel; Garcia-Lopez, M. Teresa; Gonzalez-Muniz, Rosario;

Martin-Martinez, Mercedes; Ballaz, Santiago;  
 Cenarruzabeitia, Edurne; LaTorre, Miriam; Del Rio,  
 Joaquin; Herranz, Rosario  
 CORPORATE SOURCE: Instituto de Quimica Medica (CSIC), Madrid, E-28006,  
 Spain  
 SOURCE: Journal of Medicinal Chemistry (1999), 42(22),  
 4659-4668  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Analogs of the previously reported potent and highly selective CCK1  
 receptor antagonist (4aS,5R)-2-benzyl-5-(N-Boc-tryptophyl)amino-1,3-  
 dioxoperhydropyrido-[1,2-c]pyrimidine (I) were prepared to explore the  
 structural requirements at the Boc-tryptophan domain for CCK1 receptor  
 affinity. Structural modifications of I involved the Trp side chain, its  
 conformational freedom, the Boc group, and the carboxamide bond. Results  
 of the CCK binding and in vitro functional activity evaluation showed  
 three highly strict structural requirements: the type and orientation of  
 the Trp side chain, the H-bonding acceptor carbonyl group of the  
 carboxamide bond, and the presence of the Trp amino protection Boc.  
 Replacement of this acid-labile group with 3,3-dimethylbutyryl or  
 tert-butylaminocarbonyl conferred acid stability to several analogs which  
 retained a high potency and selectivity in binding to CCK1 receptors, as  
 well as an in vivo antagonist activity against the acute pancreatitis  
 induced by caerulein in rats. Oral administration of these analogs also  
 produced a lasting antagonism to the hypomotility induced by CCK-8 in  
 mice, suggesting a good bioavailability and metabolic stability.

IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of (tryptophyl)aminodioxoperhydropyrido[c]pyrimidine-based  
 potent and selective CCK1 receptor antagonists in relation to  
 structural modifications at tryptophan domain)

RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 24 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:270546 CAPLUS

DOCUMENT NUMBER: 129:16374

TITLE: The use of heterocycles for the conformational

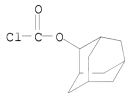
restriction of biologically active peptoids

AUTHOR(S): Horwell, David C.; Lewthwaite, Russell A.; Pritchard,

Martyn C.; Ratcliffe, Giles S.; Rubin, J. Ronald

CORPORATE SOURCE: Parke-Davis Neurosci. Research Centre, Cambridge, CB2

2QB, UK  
 SOURCE: Tetrahedron (1998), 54(18), 4591-4606  
 CODEN: TETRAB; ISSN: 0040-4020  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 129:16374  
 AB A series of piperazinone ring systems have been synthesized as a means of evaluating the effect of conformational restriction on high affinity non-peptide NK1, NK3 and CCK-B receptor ligands. The synthesis of the targeted heterocycles is described along with a discussion of their affinities for their resp. receptor types.  
 IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (use of heterocycles for conformational restriction of biol. active peptoids)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)

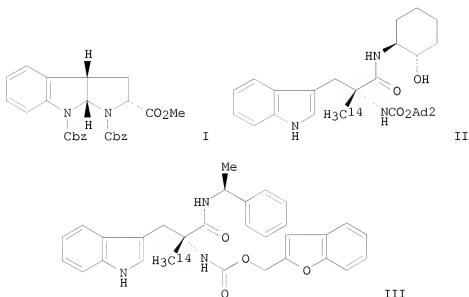


REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 25 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1998:122836 CAPLUS  
 DOCUMENT NUMBER: 128:204834  
 TITLE: Synthesis of 5-membered ring-type compounds as potential cholecystokinin receptor ligands  
 AUTHOR(S): Pentassuglia, Giorgio; Araldi, Gian Luca; Donati, Daniele; Feriani, Aldo; Oliosi, Beatrice; Pasquarello, Alessandra; Ursini, Antonella  
 CORPORATE SOURCE: Glaxo Wellcome S.p.A., Medicines Research Centre, Verona, 37135, Italy  
 SOURCE: Farmaco (1997), 52(10), 573-581  
 CODEN: FRMCE8; ISSN: 0014-827X  
 PUBLISHER: Societa Chimica Italiana  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



154075  
 AUTHOR(S): Ekhato, I. Victor; Huang, Yun  
 CORPORATE SOURCE: Parke-Davis Pharmaceutical Research Division of Warner-Lambert Company, Department of Chemical Development, Ann Arbor, MI, 48105, USA  
 SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals (1997), 39(12), 1019-1038  
 CODEN: JLCRD4; ISSN: 0362-4803  
 PUBLISHER: John Wiley & Sons Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 128:75654  
 GI

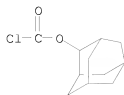


AB [2R-(2 $\alpha$ , 3 $\alpha$ , 8 $\alpha$ )]-2,3,3 $\alpha$ ,8 $\alpha$ -Tetrahydro-pyrrolo[2,3-b]indole-1,2,8-tricarboxylic acid-1,8-dibenzyl ester 2-Me ester (I), its [2S-(2 $\beta$ , 3 $\alpha$ , 8 $\alpha$ )]-isomer, and the tribenzyl ester analogs were prepared. From these [2,3-b]indole-1,2,8-tricarboxylic acid esters we accomplished a simple, high yielding preparation of enantiopure  $\alpha$ -methyltryptophan and Me ester derivs. Using this protocol, we inexpensively made (R)- $\alpha$ -[14C]methyltryptophan Me ester, and in subsequent reactions converted it into PD 145942, II (Ad2 = 2-adamantyl) and PD 154075, III. Both of these compds. are drug candidates in preclin. study for the treatment of anxiety and emesis resp.

IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of methyltryptophan and its application in the preparation of labeled PD 145942 and PD 154075)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 27 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:771577 CAPLUS

DOCUMENT NUMBER: 128:48482

TITLE: Amino acids and peptides. LI. Application of the 2-adamantyloxycarbonyl (2-Adoc) group to the protection of the hydroxyl function of tyrosine in peptide synthesis

AUTHOR(S): Okada, Yoshio; Shintomi, Noriyuki; Kondo, Yukihiro; Yokoi, Toshio; Joshi, Shima; Li, Wei

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Kobe Gakuin University, Kobe, 651-21, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1997), 45(11), 1860-1864

PUBLISHER: CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Pharmaceutical Society of Japan

LANGUAGE: Journal

AB A 2-adamantyloxycarbonyl (2-Adoc) group was introduced as a protecting

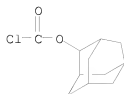
group for the hydroxyl function of Tyr through the Shotten-Bauman reaction of 2-adamantyloxycarbonyl chloride with the copper complex of Tyr. The 2-Adoc group is stable to trifluoroacetic acid (TFA), 5.0 N HCl/dioxane, hydrogenation over a Pd catalyst and tertiary amine, and is easily removed by treatment with 1 M trifluoromethanesulfonic acid (TFMSA)-thioanisole/TFA and HF. Boc-Tyr(2-Adoc)-OH (Boc = Me<sub>3</sub>CO<sub>2</sub>C) was prepared by the reaction of Boc<sub>2</sub>O and H-Tyr(2-Adoc)-OH in the presence of Et<sub>3</sub>N. Boc-Tyr(2-Adoc)-OH was successfully applied to the synthesis of Boc-Ala-Thr-Val-Lys(2-Adoc)-Phe-Lys(2-Adoc)-Tyr(2-Adoc)-Lys(2-Adoc)-Gly-OH, corresponding to the sequence 1-9 of *Sulfolobus solfataricus* RNase, and Boc-Tyr(2-Adoc)-Asp(O-2-Ada)-Glu(O-cHex)-Gly-OH, corresponding to the sequence 33-36 of *S. solfataricus* RNase. Boc-Phe-Lys(2-Adoc)-Tyr(2-Adoc)-Lys(2-Adoc)-Gly-OBzl was treated with anhydrous HF to afford H-Phe-Lys-Tyr-Lys-Gly-OH without any side reactions in good yield.

IT 53120-53-9, 2-Adamantyl chloroformate

RL: RCT (Reactant); RACT (Reactant or reagent)  
(application of adamantyloxycarbonyl protective group for the protection tyrosine side chains in peptide synthesis)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 28 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:342745 CAPLUS

DOCUMENT NUMBER: 127:51005

TITLE: Preparation of N-substituted cycloalkyl and polycycloalkyl  $\alpha$ -substituted Trp-Phe- and phenethylamine derivatives as anxiolytics and cholecystokinin activity-modifying agents

INVENTOR(S): Horwell, David C.; Pritchard, Martyn C.; Roberts, Edward; Richardson, Reginald S.; Aranda, Julian

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: U.S., 108 pp., Cont.-in-part of U.S. Ser. No. 958,196, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5631281	A	19970520	US 1994-235814	19940428
AU 9059628	A	19910117	AU 1990-59628	19900628
AU 644088	B2	19931202		
ZA 9005057	A	19920226	ZA 1990-5057	19900628
EP 479910	A1	19920415	EP 1990-911185	19900628
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
JP 04506079	T	19921022	JP 1990-510126	19900628
JP 2972331	B2	19991108		
CA 2060652	C	20010821	CA 1990-2060652	19900628
CA 2344707	C	20020730	CA 1990-2344707	19900628
US 5278316	A	19940111	US 1990-629809	19901219
FI 106197	B1	20001215	FI 1991-6060	19911220
NO 9105122	A	19920227	NO 1991-5122	19911227
NO 301831	B1	19971215		
US 5580896	A	19961203	US 1995-447142	19950522
US 5622983	A	19970422	US 1995-447141	19950522
PRIORITY APPLN. INFO.:				
			US 1989-374327	B2 19890629
			US 1989-422486	B2 19891016
			US 1990-580811	B2 19900605
			US 1990-545222	B2 19900628
			US 1990-629809	A3 19901219
			US 1992-958196	B2 19921007
			US 1990-530811	A 19900605
			NZ 1990-234264	A 19900627





their preparation. An addnl. feature of the invention is the use of the subject compds. to prepare pharmaceutical and diagnostic compns. Thus, methyltryptophan derivative II, prepared from tert-butoxycarbonyl-L-phenylalaninol, 2-adamantyloxycarbonyl- $\alpha$ -methyl-D-tryptophan, and monomethyl fumarate, displayed  $K_i = 0.00008 \mu\text{M}$  in a central cholecystokinin binding assay.

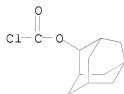
IT 53120-53-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 1(poly)cycloalkoxycarbonyl]methyltryptophan derivs. as anxiolytics and cholecystokinin activity-modifying agents)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 29 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:213304 CAPLUS

DOCUMENT NUMBER: 126:305766

TITLE: Amino acids and peptides. L. Development of a novel N $\pi$ -protecting group for histidine, N $\pi$ -2-adamantyloxymethylhistidine, and its application to peptide synthesis

AUTHOR(S): Okada, Yoshio; Wang, Jidong; Yamamoto, Takeshi; Yokoi, Toshio; Mu, Yu

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Kobe Gakuin University, Kobe, 651-21, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1997), 45(3), 452-456

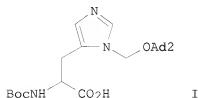
CODEN: CPBTAL; ISSN: 0009-2363

PUBLISHER: Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



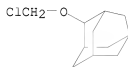
AB N $\alpha$ -tert-butyloxycarbonyl-N $\pi$ -adamantyloxymethylhistidine, Boc-His(N $\pi$ -2-Adom)-OH (I), was prepared by the reaction of

20% Boc-His(N $\tau$ -Boc)-OMe with 2-adamantyloxymethyl chloride (2-Adom-Cl) followed by saponification. The 2-Adom group was stable to TFA, 1 N NaOH and piperidine/DMF and was easily removed by 1 M trifluoromethanesulfonic acid-thioanisole/TFA and HF. This new protecting group suppressed racemization during peptide synthesis and exhibited high solubility in organic solvents. It was applied to the synthesis of TSH-releasing hormone (TRH) using both solution and solid-phase methods. The 2-Adom group can be used for peptide synthesis in combination with the Boc group as the Na-protecting group in both solution and solid-phase methods.

IT 177609-29-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (adamantyloxymethyl as a protecting group for imidazole  $\pi$ -N of histidine)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 30 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:70350 CAPLUS

DOCUMENT NUMBER: 126:199453

TITLE: Preparation of adamantyl indolylalkylcarbamates and analogs as cholecystokinin antagonists

INVENTOR(S): Horwell, David C.; Roberts, Edward; Holmes, Ann; Padia, Janak K.; Roark, William H.; Roth, Bruce D.; Trivedi, Bharat K.; Kleinschroth, Jurgen; Rees, David C.; Richardson, Reginald S.

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: U.S., 77 pp., Cont.-in-part of U.S. Ser. No. 839, 647, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5593967	A	19970114	US 1993-41647	19930401
ZA 9106922	A	19930301	ZA 1991-6922	19910830
US 5846942	A	19981208	US 1996-709316	19960909
PRIORITY APPLN. INFO.:			US 1990-576628	B2 19900831
			US 1991-726655	B2 19910712
			US 1992-839647	B2 19920221
			US 1993-41647	A3 19930401

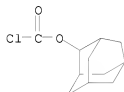
OTHER SOURCE(S): MARPAT 126:199453

AB R1AE(CH2)mCR2(CR5R6R7)n(CH2)pXq(CHR3)r(CHR4)sYt(CR20R12)u(CHR13)vR8 [I; A = bond, O, (alkyl)imino, etc.; E = bond, divalent amino acid residue, (CHR3)r, NHCO, CO2, etc.; R1 = (poly)cycloalkyl, heterocyclyl, etc.; R2,R20 = H, alkyl, vinyl, alkoxy(alkyl), aryl(alkyl), etc.; R3,R4 = groups cited for R2 or (CH2)nBD; B = bond, CO2(CH2)n, CONH(CH2)n, etc.; D = H, OH, CO2H, alkoxy(alkyl), CH2OH, alkoxy(alkyl), etc.; R5,R6 = H or alkyl; R7,R8 = cycloalkyl, (hetero)aryl, etc.; R12,R13 = H or (CH2)nBD; R12R13 = bond; X,Y = CONH, NHCO, CO2, CH2O, etc.; m,n,p-v = 0-6] were prepared. Thus, R102CNHCHRCH2R7 (R1 = 2-adamantyl, R7 = 3-indolyl) (II; R = CO2H) was converted in 2 steps to (R)-II (III; R = CHO) which was reductively aminated by (S)-PhCH2CH(NH2)CH2OH to give III [R = (S)-CH2NHCH(CH2OH)CH2Ph]. Data for biol. activity of I were given.

IT 53120-53-9P, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of adamantyl indolylalkylcarbamates and analogs as cholecystokinin antagonists)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 31 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:568849 CAPLUS

DOCUMENT NUMBER: 125:301545

TITLE: Synthesis and receptor binding affinity of cholecystokinin receptor ligands: 2- and 1-indolyl derivatives of PD134308

AUTHOR(S): Araldi, Gianluca; Donati, Daniele; Oliosi, Beatrice; Ursini, Antonella; Van Amsterdam, Frank

CORPORATE SOURCE: Med. Res. Cent., Glaxo Wellcome S.p.A., Verona, 37135, Italy

SOURCE: Farmaco (1996), 51(7), 471-476

CODEN: FRMCE8

PUBLISHER: Societa Chimica Italiana

DOCUMENT TYPE: Journal

LANGUAGE: English

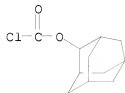
AB The synthesis of two "dipeptoids" structurally related to the CCK-B antagonist CI-988 (PD134308) is described. (R)-2-AdocNHCHC(CH2R)CONHCH2CHPhNHCOCH2CH2CO2H (2-Adoc = 2-adamantylloxycarbonyl, R = 2- or 1-indolyl) were prepared in order to define the role of the tryptophan moiety in this series of "dipeptoids". They were evaluated as competitors in the binding of [3H]-CCK8s on guinea pig brain CCK-B receptors.

IT 53120-53-9, 2-Adamantyl chloroformate

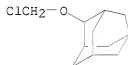
RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis of indolyl dipeptoids and their cholecystokinin receptor binding affinity)

RN 53120-53-9 CAPLUS  
CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3</sup>,7]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 32 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1996:257355 CAPLUS  
DOCUMENT NUMBER: 125:34138  
TITLE: Synthesis of N $\alpha$ -2-adamantylloxymethylhistidine, His(N $\alpha$ -2-Adom), and its evaluation for peptide synthesis  
AUTHOR(S): Okada, Yoshio; Wang, Jidong; Yamamoto, Takeshi; Mu, Yu  
CORPORATE SOURCE: Faculty Pharmaceutical Sciences, Kobe Gakuin Univ., Kobe, 651-21, Japan  
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1996), (8), 753-4  
CODEN: JCPRB4; ISSN: 0300-922X  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 125:34138  
AB N $\alpha$ -2-Adamantylloxymethylhistidine, His(N $\alpha$ -2-Adom), is prepared and successfully applied to the synthesis of TSH-releasing hormone (TRH) in combination with tert-butyloxycarbonyl (Boc) as the N $\alpha$ -protecting group. This new protecting group suppressed racemization during peptide synthesis and exhibited high solubility in organic solvents.  
IT 177609-29-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and peptide coupling reactions of protected (adamantylloxymethyl)histidine)  
RN 177609-29-9 CAPLUS  
CN Tricyclo[3.3.1.1<sup>3</sup>,7]decane, 2-(chloromethoxy)- (CA INDEX NAME)



L13 ANSWER 33 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1996:213862 CAPLUS  
DOCUMENT NUMBER: 124:306530  
TITLE: Synthesis and receptor-binding affinity of dipeptoid

cholecystokinin ligands

AUTHOR(S): Araldi, G.; Donati, D.; Oliosi, B.; Pasquarello, A.; Polinelli, S.; Tarzia, G.; Ursini, A.; van Amsterdam, F. T. M.

CORPORATE SOURCE: Glaxo SpA, Verona, 37135, Italy

SOURCE: European Journal of Medicinal Chemistry (1996), 31(3), 215-20

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

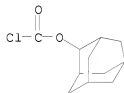
AB This paper describes the synthesis of methyloxoadamantylloxycarbonylaminopropylamino phenylethylaminooxobutanoic acid derivs., which are structurally related to PD134308 and in which the indole moiety is replaced by other aromatic groups. Cholecystokinin-A and -B (CCK-A and CCK-B) receptor binding affinities of these analogs are described and the contribution of the various rings is discussed. Several of the compds. prepared have CCK-B receptor binding values similar to that reported for PD134308 and are highly selective over the CCK-A receptor. They represent potential therapeutic agents for anxiety.

IT 53120-53-9, 2-Adamantyl chloroformate

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation and receptor-binding affinity of dipeptoid cholecystokinin ligands)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 34 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:127040 CAPLUS

DOCUMENT NUMBER: 124:246220

TITLE: Photochemical reactions of some mono- and diketo derivatives of adamantane in different solvents

AUTHOR(S): Rykov, S. V.; Skakovskii, E. D.; Oppengeim, V. D.; Bagrii, E. I.; Filatova, M. P.

CORPORATE SOURCE: A. V. Topchiev Inst. Petrochemical Synthesis, Russian Academy Sci., Moscow, 117912, Russia

SOURCE: Izvestiya Akademii Nauk, Seriya Khimicheskaya (1995), (9), 1833-5

CODEN: IASKEA

PUBLISHER: Institut Organicheskoi Khimii im. N. D. Zelinskogo Rossiiskoi Akademii Nauk

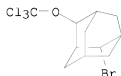
DOCUMENT TYPE: Journal

LANGUAGE: Russian

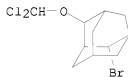
OTHER SOURCE(S): CASREACT 124:246220

AB Adamantanes are photoactive in the presence of CC14 and CDC13. The mechanism of photolysis suggested to include the formation of singlet- or

triplet-excited donor-acceptor complexes.  
 IT 174972-28-2 174972-29-3  
 RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)  
 (photochem. reactions of mono- and diketo adamantane derivs. in  
 presence of carbon tetrachloride)  
 RN 174972-28-2 CAPLUS  
 CN Tricyclo[3.3.1.1.3,7]decane, 2-bromo-4-(trichloromethoxy)- (CA INDEX NAME)



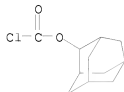
RN 174972-29-3 CAPLUS  
 CN Tricyclo[3.3.1.1.3,7]decane, 2-bromo-4-(dichloromethoxy)- (CA INDEX NAME)



L13 ANSWER 35 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:836390 CAPLUS  
 DOCUMENT NUMBER: 124:56661  
 TITLE: Amino acids and peptides. Part 42. Application of the  
 2-adamantylloxycarbonyl (2-Adoc) group to the  
 protection of the imidazole function of histidine in  
 peptide synthesis  
 AUTHOR(S): Nishiyama, Yasuhiro; Shintomi, Noriyuki; Kondo,  
 Yukihiro; Izumi, Takako; Okada, Yoshio  
 CORPORATE SOURCE: Faculty Pharmaceutical Sciences, Kobe-Gakuin  
 University, Kobe, 651-21, Japan  
 SOURCE: Journal of the Chemical Society, Perkin Transactions  
 1: Organic and Bio-Organic Chemistry (1995), (18),  
 2309-13  
 CODEN: JCPRB4; ISSN: 0300-922X  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 124:56661  
 AB The Nim-2-adamantylloxycarbonyl (2-Adoc) group has been found to be both  
 suitable for protection of the imidazole function of the histidine residue  
 in peptide synthesis in terms of its stability to trifluoroacetic acid,  
 tertiary amines and 1-hydroxybenzotriazole and in its reduction of the  
 racemization rate during the coupling reaction. Nim-2-Adoc protection has  
 also been applied successfully to the solid-phase synthesis of  
 TSH-releasing hormone which depends on tert-butoxycarbonyl (Boc)-chemical  
 IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (application of adamantylloxycarbonyl group to protection of imidazole

function of histidine in peptide synthesis)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)

L13 ANSWER 36 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:742563 CAPLUS

DOCUMENT NUMBER: 123:169496

TITLE: Preparation of  $\alpha$ -methyl-(R)-tryptophyl-arylcyloalkylalkylamides as ligands for gastrin receptors

INVENTOR(S): Pascal, Yves; Calvet, Alain Pierre; Grouhel, Agnes; Junien, Jean-Louis; Pascaud, Xavier Bernard Louis; Roman, Francois Joseph; Wettstein, Joseph

PATENT ASSIGNEE(S): Institut de Recherche Jouveinal (I. R. J.), Fr.

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

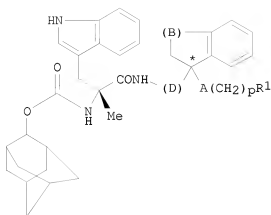
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9415917	A1	19940721	WO 1994-FR33	19940111
W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2700540	A1	19940722	FR 1993-331	19930115
FR 2700540	B1	19950217		
AU 9458615	A	19940815	AU 1994-58615	19940111
PRIORITY APPLN. INFO.:			FR 1993-331	A 19930115
			WO 1994-FR33	W 19940111

OTHER SOURCE(S): MARPAT 123:169496

GI



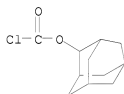


AB The title compds. [I; A = direct bond, NHCO; B = CH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>; D = direct bond, CH<sub>2</sub>; R<sub>1</sub> = 1H-tetrazol-5-yl, COR<sub>2</sub>; R<sub>2</sub> = HO, alkoxy, N-indolinylyl, (un)substituted cycloalkylamino; p = 0-2; the \* represents an asym. C atom], useful as gastrin receptor ligands, and of use in treating gastric and/or central nervous system disorders, are prepared and I-containing formulations presented. Thus, 3-[1-[1-[N-[(2-adamantyl-oxycarbonyl)-α-methyl-(R)-tryptophyl-aminoethyl]indanyl]amino]-3-oxopropanoic acid N-methyl-D-glucamine salt, m.p. 115-120°, was prepared in 6 steps and demonstrated IC<sub>50</sub> of 0.55 nM for gastrin receptors and 1.30 nM for CCK<sub>B</sub> receptors.

IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of α-methyl-(R)-tryptophyl-aryl-cycloalkylalkylamides as ligands for gastrin receptors)

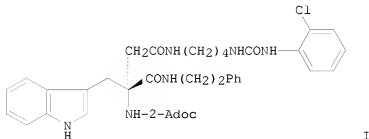
RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 37 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:630741 CAPLUS  
 DOCUMENT NUMBER: 123:314414  
 TITLE: The asymmetric synthesis of non-peptide CCK-A receptor agonists  
 AUTHOR(S): Burgaud, B. G. M.; Horwell, D. C.; Pritchard, M. C.; Bernad, N.; Martinez, J.  
 CORPORATE SOURCE: Parke-Davis Neuroscience Research Centre, Cambridge, CB2 2QB, UK  
 SOURCE: Tetrahedron: Asymmetry (1995), 6(5), 1081-4

PUBLISHER:	CODEN: TASYE3; ISSN: 0957-4166
DOCUMENT TYPE:	Elsevier
LANGUAGE:	Journal
OTHER SOURCE(S):	English
GI	CASREACT 123:314414

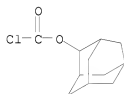


AB The asym. synthesis, CCK receptor binding affinities and CCK-A agonist properties of novel non-peptide CCK-A receptor selective ligand I is reported.

IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (asym. synthesis of non-peptide CCK-A receptor agonists)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 38 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:606572 CAPLUS

DOCUMENT NUMBER: 123:33642

TITLE: Preparation of amino acid amide analogs as cholecystokinin antagonists.

INVENTOR(S): Horwell, David C.; Aranda, Julian; Augelli-Szafran, Corinne; Bettle, Hans-Jürgen; Holmes, Ann; Mullican, Michael D.; Pritchard, Martyn C.; Richardson, Reginald S.; Roberts, Edward; et al.

PATENT ASSIGNEE(S): Warner-Lambert Co., USA

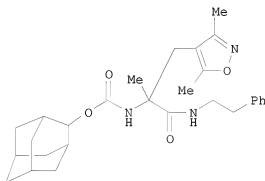
SOURCE: U.S., 64 pp. Cont.-in-part of U.S. Ser. No. 576,308, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5331006	A	19940719	US 1991-726656	19910712
WO 9204025	A1	19920319	WO 1991-US6181	19910829
W: AU, CA, FI, JP, KR, NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9186538	A	19920330	AU 1991-86538	19910829
ZA 9106918	A	19930301	ZA 1991-6918	19910830
PRIORITY APPLN. INFO.:			US 1990-576308	B2 19900831
			US 1991-726656	A 19910712
			WO 1991-US6181	A 19910829
OTHER SOURCE(S):		MARPAT 123:33642		
GI				



AB R1ANHCR2(CH2Ar2)CONR9CR12R3CR13R4Ar [R1 = (substituted) cycloalkyl, polycycloalkyl; A = (CH2)nCO, SO2, SO, NHCO, (CH2)nO2C, SCO, etc.; n = 0-6; R2 = alkyl, CH:CH2, C.tplbond.CH, (CH2)nAr, etc.; R3, R4 = H, R2, etc.; R9 = H, alkyl, (CH2)nCO2R, etc.; R = H, alkyl; R12, R13 = H or are independently taken with R3, R4, resp., to form a moiety doubly bonded to C; Ar = (substituted) (poly)cyclic carbo- or heterocyclic moiety; Ar2 = Ar, or CH2Ar2 = sidechain of a biol. significant amino acid; with provisos], were prepared Title compound I was prepared by solution phase methods.

Title compds. were active in CCK binding assays using mouse cerebral cortex preps. Title compds. are claimed as ulcer inhibitors.

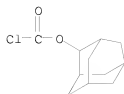
IT 53120-53-9 163798-91-2

RL: RCT (Reactant); RACT (Reactant or reagent)

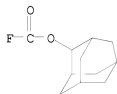
(preparation of amino acid amide analogs as cholecystokinin antagonists)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



RN 163798-91-2 CAPLUS  
 CN Carbonofluoridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



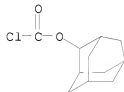
L13 ANSWER 39 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:538254 CAPLUS  
 DOCUMENT NUMBER: 122:291527  
 TITLE: Preparation of amino acid amide cholecystokinin antagonists.  
 INVENTOR(S): Kerwin, James F., Jr.; Holladay, Mark W.; Bennett, Michael J.  
 PATENT ASSIGNEE(S): Abbott Laboratories, USA  
 SOURCE: U.S., 42 pp. Cont.-in-part of U.S. Ser. No. 793,414, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5346907	A	19940913	US 1993-17565	19930216
JP 03503650	T	19910815	JP 1989-505008	19890404
EP 442878	A1	19910828	EP 1989-905266	19890404
R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
PRIORITY APPLN. INFO.:			US 1988-177715	B2 19880405
			US 1989-582896	B2 19890404
			US 1989-376778	B2 19890707
			US 1990-793414	B2 19900626
			WO 1989-US1412	W 19890404

OTHER SOURCE(S): MARPAT 122:291527  
 AB ABCONR1CDR2CONR3R4 [A = (substituted) heteroaryl; B = null, O, S, (substituted) ethylene; R1 = H, alkyl; R2 = H, aralkyl, alkyl, cycloalkyl, alkenyl; R2D = (O -interrupted) alkylene; D = H, alkyl, alkenyl, cycloalkyl, (substituted) aryl, heterocyclyl, heterocyclylalkyl, etc.; R3 = H, alkyl, alkoxyalkyl, alkenyl, cycloalkyl, aralkyl,

alkoxycarbonylalkyl; R3D = alkylaminocarbonyl, etc.; R4 = alkyl, alkoxyalkyl, alkenyl, aryl, aralkyl, cycoalkyl, cyanoalkyl, alkoxycarbonylalkyl, etc.; NR3R4 = (substituted) heterocyclyl; with provisos], were prepared. Thus, BOC-(R)-Val-OH was treated with BOP-Cl, Et3N, and dipentylamine in CH2Cl2 at 0° to give 79% amide, which was deprotected with HCl in dioxane to give 100% (R)-valine dipentylamide hydrochloride. This was treated with EDCI, hydroxybenzotriazole, and quinoline-3-carboxylic acid in CH2Cl2 to give 54% N-(3'-quinolinylcarbonyl)-(R)-valine dipentylamide. This inhibited [125I]-BH-CCK8 binding to pancreatic and cortical membrane preps. with IC50 = 40 nM and 17,000 nM, resp., and inhibited CCK8-induced amylase release with IC50 = 290 nM.

IT 53120-53-9, 2-Adamantylloxy chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of amino acid amide cholecystokinin antagonists)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 40 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:420808 CAPLUS  
 DOCUMENT NUMBER: 123:111679  
 TITLE: Bis-urea agents acting at cholecystokinin receptors  
 INVENTOR(S): Tait, Bradley D.; Wilson, Michael W.  
 PATENT ASSIGNEE(S): Warner-Lambert Co., USA  
 SOURCE: U.S., 29 pp. Cont.-in-part of U.S. Ser. No. 947,234, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5389682	A	19950214	US 1993-118374	19930913
WO 9406757	A1	19940331	WO 1993-US8733	19930915
W: AU, CA, CZ, FI, HU, JP, KR, NO, NZ, RU, SK				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9349245	A	19940412	AU 1993-49245	19930915
US 6103761	A	20000815	US 1994-325852	19941019
PRIORITY APPLN. INFO.:			US 1992-947234	B2 19920918
			US 1993-118374	A 19930913
			WO 1993-US8733	W 19930915

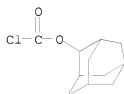
OTHER SOURCE(S): MARPAT 123:111679  
 AB The invention concerns a series of novel bis-urea derivs., nonpeptides, which show good binding affinity for the CCK-B receptor. The compds.,

comps. containing them, methods of preparation, and utilities including anxiety, gastric acid secretion inhibition, and psychoses are included. Binding affinity for CCK-B (Ki) for representative comps. of the invention were in the range 93-371 nM.

IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (bis-urea agents acting at cholecystokinin receptors)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 41 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:354680 CAPLUS

DOCUMENT NUMBER: 123:199410

TITLE: Modulators of cholecystokinin

INVENTOR(S): Sugg, Elizabeth E.; Dezube, Milana; Hirst, Gavin C.

PATENT ASSIGNEE(S): Glaxo Inc., USA

SOURCE: U.S., 23 pp.  
 CODEN: USXXAM

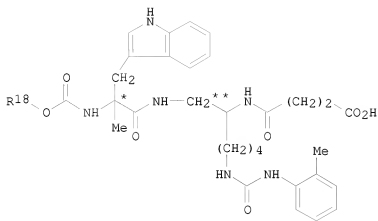
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 5380872	A	19950110	US 1992-914918	19920714
US 5508432	A	19960416	US 1994-255592	19940608
PRIORITY APPLN. INFO.:			US 1992-914918	A1 19920714
OTHER SOURCE(S):	MARPAT	123:199410		
GI				

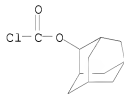


AB CCK modulators, e.g. agonists or antagonists, of the following formula (I;  
 R18 = benzyl, adamantyl, t-Bu or trans-2-methylcyclohexyl; \* = R, \*\* = R  
 or S). In vitro guinea pig gall bladder assay [% acetylcholine-induced  
 maximum contraction for the test compound at 30mM or x-fold shift of the CCK8  
 curve in the presence of the test compound (30mM)]: from 6 to 64.7% and x =  
 6.8 to 125. Pharmaceutical formulations were given.

IT 53120-53-9P, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (dipeptoid modulators of cholecystokinin)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 42 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:266955 CAPLUS

DOCUMENT NUMBER: 122:55730

TITLE: Preparation of arylbis-ureas and benzenesulfonamides  
 acting at cholecystokinin receptors

INVENTOR(S): Tait, Bradley Dean; Wilson, Michael William

PATENT ASSIGNEE(S): Warner-Lambert Co., USA

SOURCE: PCT Int. Appl., 112 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9406757	A1	19940331	WO 1993-US8733	19930915
W: AU, CA, CZ, FI, HU, JP, KR, NO, NZ, RU, SK				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5389682	A	19950214	US 1993-118374	19930913
AU 9349245	A	19940412	AU 1993-49245	19930915
PRIORITY APPLN. INFO.:			US 1992-947234	A 19920918
			US 1993-118374	A 19930913
			WO 1993-US8733	W 19930915

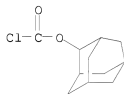
OTHER SOURCE(S): MARPAT 122:55730

AB Title compds. ZAOCMWCM'W'Q'A'Z' I; (Z, Z' = H, NC, C1-9 alkyl, (substituted) c5-12 cyclo- or polycycloalkyl; A, A' = bond, (CH2)mCONY'(CH2)n wherein Y' = H, Ph, PhCH2, C1-4 alkyl, R2O2C(CH2)n, R2RINCO(CH2)n wherein m, n = 0-3, R1, R2 = H, alkyl, etc.; M, M' = H, F, Me; Q, Q' = NY, NY' O wherein Y = Y'; W, W' = (substituted) Ph, H, NC, MeS, CF3SO2, CHO, AcO, halo, heterocyclyl, etc.) or a salt thereof, are prepared I are claimed as appetite suppressants, reducing gastric acid secretion, reducing anxiety, effective for treating gastrointestinal ulcers, psychosis, schizophrenia, and abuse of drugs (no data). To [R-(R,R)]-1,2-diamino-1,2-diphenylethane in Et2O was added 4-(trifluoromethyl)phenyl isocyanate to give [R-(R,R)]-N-(2-amino-1,2-diphenylethyl)-N'[[4-(trifluoromethyl)phenyl]urea. To this in CH2Cl2 was added BzCl and Et3N to give after workup [R-(R,R)]-N-[1,2-diphenyl-2-[[[4-(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]benzamide. A large number of I were prepared. Several representative I were tested and showed good binding affinity for CCK-B receptor.

IT 53120-53-9, 2-Adamantyl chloroformate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, in preparation of drug for binding to CCK-B receptor)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 43 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:246509 CAPLUS

DOCUMENT NUMBER: 122:32016

TITLE: Preparation of N-substituted cycloalkyl and polycycloalkyl  $\alpha$ -substituted tryptophanylphenylalanine derivatives as drugs.

INVENTOR(S): Horwell, David C.; Pritchard, Martyn C.; Richardson, Reginald S.; Roberts, Edward; Aranda, Julian

PATENT ASSIGNEE(S): Warner-Lambert Co., USA

SOURCE: U.S., 105 pp. Cont.-in-part of U.S. Ser. No. 542,222, abandoned.

CODEN: USXXAM

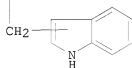


DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5278316	A	19940111	US 1990-629809	19901219
AU 9059628	A	19910117	AU 1990-59628	19900628
AU 644088	B2	19931202		
ZA 9005057	A	19920226	ZA 1990-5057	19900628
EP 479910	A1	19920415	EP 1990-911185	19900628
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
JP 04506079	T	19921022	JP 1990-510126	19900628
JP 2972331	B2	19991108		
CA 2060652	C	20010821	CA 1990-2060652	19900628
CA 2344707	C	20020730	CA 1990-2344707	19900628
CN 1049165	A	19910213	CN 1990-106804	19900629
FI 106197	B1	20001215	FI 1991-6060	19911220
NO 9105122	A	19920227	NO 1991-5122	19911227
NO 301831	B1	19971215		
US 5631281	A	19970520	US 1994-235814	19940428
US 5580896	A	19961203	US 1995-447142	19950522
US 5622983	A	19970422	US 1995-447141	19950522
PRIORITY APPLN. INFO.:				
			US 1989-374327	B2 19890629
			US 1989-422486	B2 19891016
			US 1990-530811	B2 19900605
			NZ 1990-234264	A 19900627
			US 1990-545222	B2 19900628
			US 1990-580811	B2 19900605
			CA 1990-2060652	A3 19900628
			WO 1990-US3553	A 19900628
			US 1990-629809	A3 19901219
			US 1992-958196	B2 19921007
			US 1994-235814	B3 19940428

OTHER SOURCE(S): MARPAT 122:32016  
 GI

R1ANHCR2CONR9CR3R12CR4R13Ar



I

AB Title compds. [I; R1 = (substituted) C3-12 (poly)cycloalkyl; A = (CH2)nCO, SO2, SO, NHCO, (CH2)nO2C, SCO, O(CH2)nCO, HC:CHCO; n = 0-6; R2 = alkyl, HC:CH2, C.tplbond.CH, (CH2)nAr, (CH2)nOAr, etc.; R3, R4 = H, R2, etc.; R9 = H, alkyl, (CH2)nAr, (CH2)nOAr, etc.; R12, R13 = H, or each can be taken with R3 and R4 resp. to form a moiety doubly bonded to the C atom; Ar = (substituted) mono- or polycyclic carbo- or heterocyclic ring; the indole

ring may be further substituted], were prepared I are cholecystokinin or gastrin agonists/antagonists with antianxiety, antiulcer, and antidepressant activity and are useful for preventing the withdrawal response produced by nicotine, diazepam, alc., cocaine, caffeine, or opiates. Thus, [R-(R\*,R\*)]-4-[[2-[[3-(1H-indol-3-yl)-2-methyl-1-oxo-2-[[[(tricyclo[3.3.1.1.3,7]dec-2-yloxy)carbonyl]amino]propyl]amino]-1-phenylethyl]amino]-4-oxobutanoic acid (II) (prepared in 7 steps starting from BOC-D-2-phenylglycinol) bound to central CCK receptors with  $K_i = 0.0085 \mu\text{M}$ , and inhibited feeding in rats with  $\text{MPE}_{50} = 17.4 \text{ mg/kg i.p.}$  ( $\text{MPE} = \text{maximum possible effect, i.e., zero food intake}$ ). II showed activity identical to that of diazepam in a light/dark anxiety test using mice.

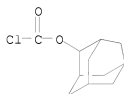
IT 53120-53-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as intermediate for cholecystokinin analog)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 44 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:224860 CAPLUS

DOCUMENT NUMBER: 122:133795

TITLE: Amino acids and peptides. Part 38. Development of a new amino-protecting group, 2-adamantylloxycarbonyl, and its application to peptide synthesis  
 AUTHOR(S): Nishiyama, Yasuhiro; Shintomi, Noriyuki; Kondo, Yukihiro; Okada, Yoshio

CORPORATE SOURCE: Faculty Pharmaceutical Sciences, Kobe-Gakuin University, Kobe, 651-21, Japan

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1994), (21), 3201-7

CODEN: JCPRB4; ISSN: 0300-922X

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 122:133795

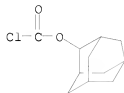
AB A new lysine  $\epsilon$ -amino protecting group, 2-adamantylloxycarbonyl (2-Adoc), was developed, and its application to the solid-phase synthesis of protected peptides was demonstrated in combination with N2-fluoren-9-ylmethoxycarbonyl (Fmoc) protection and trifluoroacetic acid (TFA)-cleavable resin support. The 2-Adoc group was applied successfully also to the solution-phase peptide synthesis depending on tert-butoxycarbonyl (Boc)-chemical

IT 53120-53-9, 2-Adamantyl chloroformate

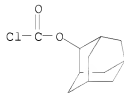
RL: RCT (Reactant); RACT (Reactant or reagent)

(development and application of lysine side chain 2-adamantylloxycarbonyl protective group to peptide synthesis)

RN 53120-53-9 CAPLUS  
CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



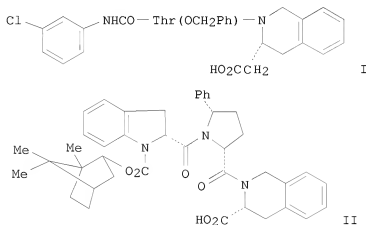
L13 ANSWER 45 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1995:218182 CAPLUS  
DOCUMENT NUMBER: 122:82049  
TITLE: Application of the 2-adamantylloxycarbonyl (2-Adoc) group to the protection of the imidazole function of histidine in peptide synthesis  
AUTHOR(S): Nishiyama, Yasuhiro; Shintomi, Noriyuki; Kondo, Yukihiro; Okada, Yoshio  
CORPORATE SOURCE: Fac. Pharm. Sci., Kobe-Gakuin Univ., Kobe, 651-21, Japan  
SOURCE: Journal of the Chemical Society, Chemical Communications (1994), (21), 2515-16  
CODEN: JCCCAT; ISSN: 0022-4936  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 122:82049  
AB The Nim-2-adamantylloxycarbonyl (2-Adoc) group is suitable for the protection of the imidazole function of the histidine residue in peptide synthesis in terms of its stability to trifluoroacetic acid (TFA), tertiary amines and 1-hydroxybenzotriazole (HOBt), and its reduction of racemization rate during the coupling reaction.  
IT 53120-53-9, 2-Adamantyl chloroformate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(application of the 2-adamantylloxycarbonyl group to the protection of histidine imidazole in peptide synthesis)  
RN 53120-53-9 CAPLUS  
CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 46 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1994:656334 CAPLUS  
DOCUMENT NUMBER: 121:256334

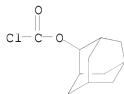
TITLE: CCK and/or gastrin receptor ligands  
 INVENTOR(S): Ryder, Hamish; Kendrick, David Alan; Semple, Graeme; Miyata, Keiji; Batt, Andrzej Roman; Mathews, Elizabeth Alice; Rooker, David Philip; Nishida, Akito  
 PATENT ASSIGNEE(S): Ferring B. V., Neth.; Yamanouchi Pharmaceutical Co. Ltd.  
 SOURCE: PCT Int. Appl., 282 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9320099	A2	19931014	WO 1993-GB614	19930325
WO 9320099	A3	19931125		
W: AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9337645	A	19931108	AU 1993-37645	19930325
PRIORITY APPLN. INFO.:			GB 1992-6757	A 19920327
			WO 1993-GB614	A 19930325
OTHER SOURCE(S):		MARPAT 121:256334		
GI				

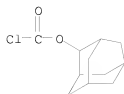


AB Peptide analogs ABC [A = aromatic, azaarom., aromatic amino acid, aralkyl, azaaralkyl, aralkanoyl, azaaralkanoyl; B = amino, aminoalkyl; C = aminol (175 compds.) were prepared. Thus, the threonine derivative I was prepared from D-1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid, Me<sub>3</sub>CO<sub>2</sub>C-Thr(OCH<sub>2</sub>Ph)-OH, and 3-ClC<sub>6</sub>H<sub>4</sub>NCO in 6 steps. I had binding affinities for cholecystokinin A and B receptors of 170 and 20 nM resp. Selective cholecystokinin B receptor antagonists also inhibit pentagastrin-stimulated gastric secretion; the indole derivative II had an ED<sub>50</sub> of 0.20  $\mu$ mole/kg in rats.

IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant, preparation of cholecystokinin antagonist peptide analogs)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 47 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1994:631319 CAPLUS  
 DOCUMENT NUMBER: 121:231319  
 TITLE: Rational design of high affinity tachykinin NK2  
 receptor antagonists  
 AUTHOR(S): Boyle, S.; Guard, S.; Hodgson, J.; Horwell, D. C.;  
 Howson, W.; Hughes, J.; McKnight, A.; Martin, K.;  
 Pritchard, M. C.; et al.  
 CORPORATE SOURCE: Parke-Davis Neuroscience Research Centre, Cambridge,  
 CB2 2QB, UK  
 SOURCE: Bioorganic & Medicinal Chemistry (1994), 2(2), 101-13  
 CODEN: BMECEP; ISSN: 0968-0896  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The rational discovery of a high affinity neurokinin-2 (NK2) receptor  
 antagonist is described utilizing a general strategy for peptide design.  
 The contribution to NK2 receptor binding affinity for each amino acid of  
 the hexapeptide min. fragment H-Leu-Met-Gln-Trp-Phe-Gly-NH2 was examined by  
 preparing derivs. where each amino acid in turn was replaced with Ala. The  
 results from this study indicated the primary importance of the Trp and  
 Phe side-chain for binding and led to the observation that Z-Trp-Phe-NH2  
 (Z = PhCH2O2C) is a micromolar affinity NK2 receptor dipeptide lead.  
 Further exploration of structure-affinity via conformationally restricted  
 analogs and N- and C-terminus modifications gave a selective, nanomolar  
 affinity NK2 receptor antagonist, 2,3-(MeO)2C6H3CH2O2C-Trp-L- $\alpha$ -MePhe-  
 Gly-NH2 (PD 147714) with an Ki = 1.4 nM [hamster urinary bladder membranes  
 and using [125I]-iodohistidylneurokinin-A (0.1 nM) as the radioligand].  
 IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (acylation by, of neurokinin receptor antagonist)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 48 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:135117 CAPLUS

DOCUMENT NUMBER: 120:135117

TITLE: Tetrapeptide CCK agonists: structure-activity studies on modifications at the N-terminus

AUTHOR(S): Elliott, Richard L.; Kopecka, Hana; Bennett, Michael J.; Shue, Youe Kong; Craig, Richard; Lin, Chun Wel; Bianchi, Bruce R.; Miller, Thomas R.; Witte, David G.; et al.

CORPORATE SOURCE: Neurosci. Res. Div., Abbott Lab., Abbott Park, IL, 60064, USA

SOURCE: Journal of Medicinal Chemistry (1994), 37(2), 309-13  
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

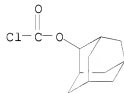
AB Analogs of the potent and selective tetrapeptide cholecystokinin-A (CCK-A) agonist Boc-Trp-Lys(CONHC6H4Me-2)-Asp-MePhe-NH2 (A-7163; Boc = Me3CO2C) in which the N-terminal Boc functionality was systematically replaced with various amides, ureas, carbamates, and sulfonamides of differing size, hydrophobicity, and stereoelectronic properties were prepared and optimized for potency, selectivity, stability, and efficacy. In general, these analogs maintained good potency and selectivity for the CCK-A receptor (guinea pig pancreas), as well as potent anorectic activity in rats. Those analogs exhibiting equal or superior activity compared to A-71623 but differing physicochem. properties may represent superior drug candidates.

IT 53120-53-9, 2-Adamantyl chloroformate

RL: RCT (Reactant); RACT (Reactant or reagent)  
(acylation by, of tetrapeptide derivative, in preparation of cholecystokinin agonist)

RN 53120-53-9 CAPLUS

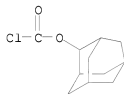
CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3</sup>,7]dec-2-yl ester (CA INDEX NAME)



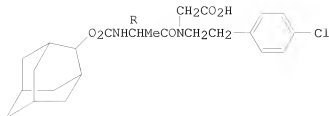
L13 ANSWER 49 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:671702 CAPLUS

DOCUMENT NUMBER: 119:271702  
 TITLE:  $\alpha,\beta$ -Didehydrotryptophan as a surrogate for  $\alpha$ -methyltryptophan in CCK 'peptoids' related to CI-988  
 AUTHOR(S): Eden, J. M.; Horwell, D. C.; Pritchard, M. C.  
 CORPORATE SOURCE: Parke-Davis Neurosci. Res. Cent., Cambridge, CB22QB, UK  
 SOURCE: Bioorganic & Medicinal Chemistry Letters (1993), 3(6), 989-92  
 CODEN: BMCLE8; ISSN: 0960-894X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The design and synthesis of high affinity  $\alpha,\beta$ -didehydrotryptophan-substituted cholecystokinin (CCK) ligands is described. Ligands selective for both the CCK-A and CCK-B receptor subtypes have been prepared  
 IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent) (acylation by, of dehydrotryptophan ester)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 50 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:617620 CAPLUS  
 DOCUMENT NUMBER: 119:217620  
 TITLE: Cholecystokinin peptidomimetics as selective CCK-B antagonists: Design, synthesis, and in vitro and in vivo biochemical properties  
 AUTHOR(S): Blommaert, Armand G. S.; Weng, Jian Hui; Dorville, Agnes; McCort, Isabelle; Ducos, Bertrand; Durieux, Christine; Roques, Bernard P.  
 CORPORATE SOURCE: Fac. Pharm., Univ. Rene Descartes, Paris, 75270, Fr.  
 SOURCE: Journal of Medicinal Chemistry (1993), 36(20), 2868-77  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



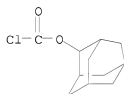
AB Antagonists of cholecystokinin-B (CCK-B) receptors have been shown to alleviate CCK4-induced panic attacks in humans and to potentiate opioid effects in animals. The clin. use of these compds. is critically dependent on their ability to cross the blood-brain barrier. In order to improve this property, new, peptoid-derived CCK-B antagonists, endowed with high affinity, selectivity, and increased lipophilicity have been developed. The affinity and selectivity of these compds. have been characterized in vitro and in vivo using guinea pig, rat, and mouse. Most of these compds. proved to be selective for the CCK-B receptor, the most potent analog (I), having a  $K_i$  value of 6.1 nM for guinea pig cortex membranes in vitro and a good selectivity ratio ( $K_i$  CCK-A/ $K_i$  CCK-B = 174). Furthermore, the in vivo affinity of I for mouse brain CCK-B receptors, following intracerebroventricular injection at different concns., was found to be 10 nmol. Using competition expts. with the specific CCK-B ligand  $[3H]pBC$  264, I was shown to cross the blood-brain barrier (0.2%) after i.p. administration in mice. This compound is therefore an interesting pharmacol. tool to further elucidate the physiopathol. role of endogenous CCK.

IT 53120-53-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(acylation by, of amino acid derivs.)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 51 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:603844 CAPLUS

DOCUMENT NUMBER: 119:203844

TITLE: Development of a new amino-protecting group, 2-adamantylloxycarbonyl (2-Adoc), and its application to the solid-phase synthesis of protected peptides

AUTHOR(S): Nishiyama, Yasuhiro; Okada, Yoshio  
CORPORATE SOURCE: Fac. Pharm. Sci., Kobe-Gakuin Univ., Kobe, 651-21, Japan

SOURCE: Journal of the Chemical Society, Chemical



Communications (1993), (13), 1083-4

CODEN: JCCCAT; ISSN: 0022-4936

DOCUMENT TYPE:

Journal

LANGUAGE:

English

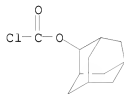
AB A new  $\varepsilon$ -amino protecting group, 2-adamantylloxycarbonyl (2-Adoc) has been developed, and its application to the solid-phase synthesis of the protected peptide has been demonstrated successfully in combination with  $\alpha$ -fluoren-9-ylmethoxycarbonyl protection and trifluoroacetic acid-cleavable resin support.

IT 53120-53-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(adamantylloxycarbonylation by, of lysine copper complex)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)

L13 ANSWER 52 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:581228 CAPLUS

DOCUMENT NUMBER: 119:181228

TITLE: Preparation of didehydrotryptophans as central CCK receptor ligands

INVENTOR(S): Horwell, David C.; Pritchard, Martyn C.

PATENT ASSIGNEE(S): Warner-Lambert Co., USA

SOURCE: U.S., 10 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5218123	A	19930608	US 1992-837016	19920218
PRIORITY APPLN. INFO.:			US 1992-837016	19920218

OTHER SOURCE(S): MARPAT 119:181228

AB RCR2R9CR9(NHZR1)CONR6NR6CR3R7CR4R8A [A = (hetero)(hydro)aromatic; R = 2- or 3-(1H-indolyl); R1 = (substituted) cycloalkyl; R2R5 = bond, (CH2)mX(CH2)n; R3, R4 = H, (CH2)pBD; B = bond, O(CH2)n, NHCO = (CH2)n, CO(CH2)n, etc.; D = CO2H, alkoxycarbonyl, CONH2, cyano, etc.; R6 = H, alkyl, carboxy(alkyl); R7, R8 = H; R7R8 = bond; X = bond, N:N, O, S, etc.; Z = (CH2)nCO, SO2, NHCO, O(CH2)nCO; m = 0-5; n = 0-6; m + n  $\geq$  1; p = 0-3] were prepared. Thus, N-[ $\alpha$ , $\beta$ -didehydro-N-[[tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl]oxy]carbonyl]tryptophyl]-L-3-phenylmethyl- $\beta$ -alanine [mixture of (E)- and (Z)-isomers] (preparation given) had  $K_i$  of 0.3 nM for binding at central CCK-B receptors in vitro.

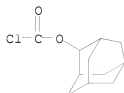
IT 53120-53-9, 2-Adamantyl chloroformate

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in preparation of didehydrotryptophan deriv central CCK  
receptor ligand)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 53 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:517830 CAPLUS

DOCUMENT NUMBER: 119:117830

TITLE: Process for the preparation of D-(-) and L-(+)-3,3-diphenylalanine and D-(-) and L-(+)-substituted 3,3-diphenylalanines and derivatives thereof

INVENTOR(S): Beylin, Vladimir; Chen, Huai G.; Goel, Om P.; Topliss, John G.

PATENT ASSIGNEE(S): Warner-Lambert Co., USA

SOURCE: U.S., 15 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5198548	A	19930330	US 1992-828399	19920130
WO 9315042	A1	19930805	WO 1993-US689	19930115
W: AU, CA, FI, HU, JP, KR, NO, NZ, RU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9335933	A	19930901	AU 1993-35933	19930115
PRIORITY APPLN. INFO.:			US 1992-828399	A 19920130
			WO 1993-US689	A 19930115

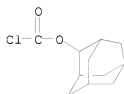
OTHER SOURCE(S): MARPAT 119:117830

AB A process for the preparation of title compds. D- and L-H<sub>2</sub>NCH[CH(C<sub>6</sub>H<sub>4</sub>R)<sub>2</sub>]CO<sub>2</sub>H (D- and L-I; R = H, Cl, Br, F, Me, CF<sub>3</sub>, MeO, 2,4-Cl<sub>2</sub>, 2,4-CI<sub>2</sub>) by treatment of racemic R<sub>1</sub>CONHCH[CH(C<sub>6</sub>H<sub>4</sub>R)<sub>2</sub>]CO<sub>2</sub>H (R<sub>1</sub> = lower alkyl, CX<sub>3</sub>; X = H, halo, aryl) with (-)-cinchonidine, separation of the diastereomeric salts by fractional crystallization, salt decomposition, and deprotection is described.

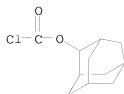
Thus, addition of 62 g (-)-cinchonidine in 400 mL hot MeOH to DL-AcNHCH(CHPh<sub>2</sub>)CO<sub>2</sub>H (preparation given) in 250 mL hot MeOH followed by cooling and crystallization

gave 36.5 g salt D-AcNHCH(CHPh<sub>2</sub>)CO<sub>2</sub>H.(-)-cinchonidine (II) and 79.6 g salt L-AcNHCH(CHPh<sub>2</sub>)CO<sub>2</sub>H.(-)-cinchonidine. Decomposition of 38.2 g salt II in 950 mL EtOAc with 270 mL 1N HCl gave 19.3 g D-AcNHCH(CHPh<sub>2</sub>)CO<sub>2</sub>H, which was hydrolyzed with 1.5 L 6N HCl to give 17.0 g D-I.HCl (R = H). D-I was used in the preparation of endothelin antagonist Ac-D-Dip-Leu-Asp-Ile-Ile-Trp-OH

(Dip = 3,3-diphenylalanine) by solid-phase methods.  
 IT 53120-53-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and acylation by, of diphenylalanine stereoisomers)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3</sup>,7]dec-2-yl ester (CA INDEX NAME)

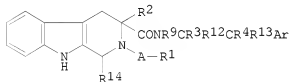


L13 ANSWER 54 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:517787 CAPLUS  
 DOCUMENT NUMBER: 119:117787  
 TITLE: Rationally designed 'dipeptoid' analogs of  
 cholecystokinin (CCK): N-terminal structure-affinity  
 relationships of  $\alpha$ -methyl-tryptophan derivatives  
 AUTHOR(S): Eden, J. M.; Higginbottom, M.; Hill, D. R.; Horwell,  
 D. C.; Hunter, J. C.; Martin, K.; Pritchard, M. C.;  
 Rahman, S. S.; Richardson, R. S.; Roberts, E.  
 CORPORATE SOURCE: Parke-Davis Neuroscience Research Centre, Cambridge,  
 CB2 2QB, UK  
 SOURCE: European Journal of Medicinal Chemistry (1993), 28(1),  
 37-45  
 CODEN: EJMCA5; ISSN: 0223-5234  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The structure-affinity relationships (SAR) between the N-termini of a  
 series of  $\alpha$ -methyltryptophan phenethylamide derivs. and the  
 cholecystokinin (CCK) B receptor are discussed. A series of compds.  
 R-X-DL- $\alpha$ MeTrp-NHCH<sub>2</sub>CH<sub>2</sub>Ph [I;  $\alpha$ MeTrp =  $\alpha$ -  
 methyltryptophan, R = cycloalkyl, bicycloalkyl, tricycloalkyl group, X =  
 O<sub>2</sub>C, SCO, NHCO, CH<sub>2</sub>CO, S(O)] were prepared The CCK-B receptor binding  
 affinities of I are discussed. The SAR form part of a systematic program  
 for the rational design of 'dipeptoid' analogs of the neuropeptide CCK.  
 Beginning with I (R = Me<sub>3</sub>C, X = O<sub>2</sub>C), the N-terminal moiety was  
 systematically changed for groups of varying size, shape and lipophilicity  
 until the optimal N-terminal group was obtained and the favored linking  
 group chosen, resulting in RO<sub>2</sub>C-D- $\alpha$ MeTrp-NHCH<sub>2</sub>CH<sub>2</sub>Ph (R =  
 2-adamantyl), with an IC<sub>50</sub> = 32 nM in the CCK-B receptor binding affinity  
 assay.  
 IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (amidation of, with methyltryptophan phenethylamide stereoisomers)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3</sup>,7]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 55 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:234478 CAPLUS  
 DOCUMENT NUMBER: 118:234478  
 TITLE: Preparation of N-cycloalkoxycarbonyl- $\beta$ -carboline  
 analogs containing phenylalanine or phenethylamine  
 moiety.  
 INVENTOR(S): Horwell, David Christopher; Roberts, Edward;  
 Trostmann, Uwe  
 PATENT ASSIGNEE(S): Warner-Lambert Co., USA  
 SOURCE: PCT Int. Appl., 92 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9204348	A1	19920319	WO 1991-US6182	19910829
W: AU, CA, FI, JP, KR, NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5244905	A	19930914	US 1991-726651	19910712
AU 9191557	A	19920330	AU 1991-91557	19910829
ZA 9106921	A	19930301	ZA 1991-6921	19910830
PRIORITY APPLN. INFO.:			US 1990-576297	A 19900831
			US 1991-726651	A 19910712
			WO 1991-US6182	A 19910829
OTHER SOURCE(S):	MARPAT 118:234478			
GI				

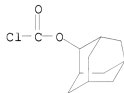


I

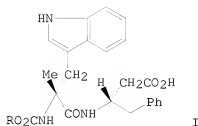
AB The title compds. [I; R<sup>1</sup> = Me<sub>3</sub>C, cycloalkyl, polycycloalkyl substituted by alkyl, halo, cyano, OR, SR, NR<sub>5</sub>R<sub>6</sub>, (CH<sub>2</sub>)<sub>n</sub>OR<sub>5</sub>; R<sup>2</sup> = H, alkyl, CH:CH<sub>2</sub>, C.tplbond.CH, CH<sub>2</sub>CH:CH<sub>2</sub>, CH<sub>2</sub>C.tplbond.CH, (CH<sub>2</sub>)<sub>n</sub>Ar, etc.; R<sub>3</sub>, R<sub>4</sub>, R<sub>14</sub> = H, R<sub>2</sub>, (CH<sub>2</sub>)<sub>n</sub>-B-D; B = bond, OC(CH<sub>2</sub>)<sub>n</sub>, NHCO(CH<sub>2</sub>)<sub>n</sub>, CONH(CH<sub>2</sub>)<sub>n</sub>, etc.; D = CO<sub>2</sub>R, CH<sub>2</sub>OR, CHR<sub>2</sub>OR, CH<sub>2</sub>SR, etc.; R = H, alkyl; R<sub>5</sub>, R<sub>6</sub> = H, alkyl; A = (CH<sub>2</sub>)<sub>n</sub>CO, SO<sub>2</sub>, S(O), NHCO, (CH<sub>2</sub>)<sub>n</sub>OCO, SCO, O(CH<sub>2</sub>)<sub>n</sub>CO, CH:CHCO, etc.; R<sub>9</sub> =

H, alkyl, etc.; n = 0-6 integer; Ar = mono- or polycyclic (substituted) carbo- or heterocyclic aromatic or hydroarom. moiety; R12, R13 = H, or each independently taken with R3 and R4 resp. to form a moiety doubly bonded to the carbon], and their pharmaceutically acceptable salts, useful as drugs, e.g., as appetite depressants, ulcer inhibitors, are prepared  $\alpha$ -Methyltryptophan Me ester was cyclocondensed with HCHO, the resulting Me 3-methyl-9H-1,2,3,4-tetrahydro- $\beta$ -carboline-3-carboxylate was N2-acylated with 2-adamantyl chloroformate, the product was hydrolyzed, and the resulting free carboxylic acid was amidated with H2NCH2CH2CO2H to give I [R1 = 2-adamantyl, R2 = Me, R3 = R4 = R9 = R12 = R13 = R14 = H, A = CO2, Ar = Ph]. In an in vitro test for the competing binding to CCK receptor sites against tritiated pentagastrin, this product demonstrated a Ki of 150 nM.

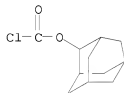
IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in preparation of carbolines as drugs)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 56 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:169582 CAPLUS  
 DOCUMENT NUMBER: 118:169582  
 TITLE: Cholecystokinin dipeptoid antagonists: design, synthesis, and anxiolytic profile of some novel CCK-A and CCK-B selective and mixed CCK-A/CCK-B antagonists Boden, P. R.; Higginbottom, M.; Hill, D. R.; Horwell, D. C.; Hughes, J.; Rees, D. C.; Roberts, E.; Singh, L.; Suman-Chauhan, N.; Woodruff, G. N.  
 AUTHOR(S):  
 CORPORATE SOURCE: Parke-Davis Neurosci. Res. Cent., Cambridge, CB2 2QB, UK  
 SOURCE: Journal of Medicinal Chemistry (1993), 36(5), 552-65  
 CODEN: JMCNAR; ISSN: 0022-2623  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



- AB The design, synthesis, and structure-activity relationships (SAR) for the development of selective dipeptoid ligands for both of the cholecystokinin (CCK) receptor subtypes CCK-A and CCK-B are described. The SAR developed is used to design a ligand with equal nanomolar binding affinity for both the CCK-A and CCK-B receptor. The CCK-B selective compds. are antagonists in electrophysiol. tests on the rat ventromedial nucleus of the hypothalamus with equilibrium constant  $K_e = 2.8$  nM for I ( $R = 2$ -adamantyl) (II) and are also anxiolytic in the mouse light/dark box test with a min. ED = 0.01 mg/kg, s.c., for II. The CCK-A selective compds. are also competitive antagonists by the inhibition of CCK-8S-evoked amylase secretion from pancreatic acinar cells with  $K_e = 16$  nM for the enantiomer of II (III). In electrophysiol. tests on the rat dorsal raphe (an area rich in CCK-A receptors), III had  $K_e = 12.8$  nM. The mixed CCK-A/CCK-B compound I [ $R = (S,S)$ -trans-2-methylcyclohexyl] showed antagonistic properties in both CCK-A and CCK-B models; thus it inhibited CCK-8S-evoked amylase secretion from pancreatic acinar cells and is anxiolytic in the light/dark box paradigm. It is concluded, therefore, that the CCK-B receptor (and not the CCK-A receptor) is responsible for the anxiolytic properties of these compds. in these test models.
- IT 53120-53-9, 2-Adamantyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (acylation by, of methyltryptophan derivs. in preparation of cholecystokinin receptor antagonists)
- RN 53120-53-9 CAPLUS
- CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 57 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:634550 CAPLUS  
 DOCUMENT NUMBER: 117:234550  
 TITLE: Amino acid analogs as CCK antagonists.  
 INVENTOR(S): Horwell, David Christopher; Aranda, Julian;  
 Augelli-Szafran, Corinne Elizabeth; Bettle, Hans  
 Jurgen; Holmes, Ann; Mullican, Michael David;

Pritchard, Martyn Clive; Richardson, Reginald Stewart;  
 Roth, Bruce David; et al.  
 PATENT ASSIGNEE(S): Warner-Lambert Co., USA  
 SOURCE: PCT Int. Appl., 209 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9204025	A1	19920319	WO 1991-US6181	19910829
W: AU, CA, FI, JP, KR, NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5331006	A	19940719	US 1991-726656	19910712
AU 9186538	A	19920330	AU 1991-86538	19910829
PRIORITY APPLN. INFO.:			US 1990-576308	A 19900831
			US 1991-726656	A 19910712
			WO 1991-US6181	A 19910829

OTHER SOURCE(S): MARPAT 117:234550

GI For diagram(s), see printed CA Issue.

AB The title compds. [I; R1 = cycloalkyl, polycycloalkyl hydrocarbonyl, etc.; A = (CH<sub>2</sub>)<sub>n</sub>CO, SO<sub>2</sub>, S(O), NHCO, OC(O), etc.; n = 0-6; R2 = alkyl, CH:CH<sub>2</sub>, C.tplbond, CH, aminoalkyl, etc.; R3, R4 = H, R2, (CH<sub>2</sub>)<sub>m</sub>-B-D; m = 0-3; B = bond, OCO(CH<sub>2</sub>)<sub>n</sub>, O(CH<sub>2</sub>)<sub>n</sub>, NHCO(CH<sub>2</sub>)<sub>n</sub>, CONH(CH<sub>2</sub>)<sub>n</sub>, CO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>, NHCOCH:CH, CO(CH<sub>2</sub>)<sub>n</sub>, etc.; D = (substituted) carboxy, hydroxymethyl, etc.; R9 = H, alkyl, etc.; R12, R13 = H; or R12R13 = bond, R13R4 = bond; Ar = mono- or polycyclic (substituted) carbo- or heteroarom. or carbo- or heterohydroarom. moiety; Ar2 = Ar, 1H-indol-yl, (CH<sub>2</sub>)<sub>n</sub>NHC(:NH)NHNH<sub>2</sub>, CH<sub>2</sub>CO<sub>2</sub>Me], useful for treatment of pain, panic disorder, drug dependence, as well as alcoholism, are prepared 2-Methyl-3-(1-naphthyl)alanine Me ester (preparation given) was N-acylated with 2-adamantyloxycarbonyl chloride, the product was hydrolyzed, and the product was amidated with phenethylamine to give I [R1 = 2-adamantyl, A = OC(O), R2 = Me, R3 = R4 = R9 = R12 = R13 = H, Ar = Ph, Ar2 = 1-naphthyl]. This showed a K<sub>i</sub>, defined as IC<sub>50</sub>/(1+[L]K<sub>a</sub>) (K<sub>a</sub> being the equilibrium dissociation constant and [L] the concentration of

the radiolabel) of 14 M. I were also tested for their ability in treating gastric damage by aspirin, anxiolytic activity, and for treating drug addiction.

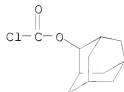
IT 53120-53-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in preparation of CCK antagonists)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 58 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:484251 CAPLUS

DOCUMENT NUMBER: 117:84251

TITLE: Cholecystokinin antagonists, their preparation and therapeutic use

INVENTOR(S): Horwell, David Christopher; Kleinschroth, Juergen; Rees, David Charles; Richardson, Reginald Stewart; Roark, William Howard; Roberts, Edward; Roth, Bruce David; Trivedi, Bharat Kalidas; Holmes, Ann; Padia, Janak Khimchand

PATENT ASSIGNEE(S): Warner-Lambert Co., USA

SOURCE: PCT Int. Appl., 211 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9204045	A1	19920319	WO 1991-US6180	19910829
W: AU, CA, FI, JP, KR, NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9187492	A	19920330	AU 1991-87492	19910829
AU 651390	B2	19940721		
EP 547178	A1	19930623	EP 1991-918880	19910829
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 06502627	T	19940324	JP 1991-517185	19910829
ZA 9106922	A	19930301	ZA 1991-6922	19910830
NO 9300709	A	19930415	NO 1993-709	19930226
NO 312298	B1	20020422		
PRIORITY APPLN. INFO.:			US 1990-576628	A 19900831
			US 1991-726655	A 19910712
			WO 1991-US6180	A 19910829

OTHER SOURCE(S): MARPAT 117:84251

AB Cholecystokinin antagonists (Markush included) are provided for treatment of obesity, hypersecretion of gastric acid in the gut, gastrin-dependent tumors, psychotic behavior, anxiety, ulcers, drug withdrawal, and panic. Preparation of the antagonists and intermediates is included; 38 specific compds. are claimed. In receptor binding studies, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl[(2-hydroxy-2-phenylethyl)amino]-3-(1H-indol-3-yl)-2-methylprop-2-yl]carbamate had an inhibition constant of 220 nM. Inhibition consts. for 29 other compds. are tabulated.

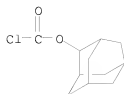
IT 53120-53-9P

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction of, for cholecystokinin antagonist)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)





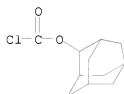
L13 ANSWER 59 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:408489 CAPLUS  
 DOCUMENT NUMBER: 117:8489  
 TITLE: Preparation of tetrapeptide cholecystokinin agonists  
 INVENTOR(S): Shiosaki, Kazumi; Nadzan, Alex M.; Kopecka, Hana;  
 Shue, Youe Kona; Holladay, Mark W.; Lin, Chun W.;  
 Nellans, Hugh N.  
 PATENT ASSIGNEE(S): Abbott Laboratories, USA  
 SOURCE: PCT Int. Appl., 216 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9119733	A1	19911126	WO 1991-US4458	19910620
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5270302	A	19931214	US 1991-713010	19910617
PRIORITY APPLN. INFO.:			US 1990-541230	A 19900620
			US 1991-713010	A 19910614
			US 1988-287955	B2 19881221
			WO 1989-US5673	A 19891218
OTHER SOURCE(S):	MARPAT 117:8489			
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB XYZQ [X = R3(CH2)nCR1R2CR4R5, (indole ring substituted) Q1; R1 = H, OH, halo, alkyl, alkoxy, haloalkyl, alkanoyl, alkoxycarbonyl, aminocarbonyl, cyano, (acyl)amino, etc; R2 = H, alkyl; R3 = bicyclic carbocyclyl, heterocyclyl; R4, R5 = H; or R4R5 = O, n = 1,2; Y = R10HN(CH2)n CH(NR9)CR11R12, R13NCOA(CH2)4CH(NR9)CR11R12; R9 = H, alkyl; R10 = C:(G)NHR13, CO(CH2)pR14, etc.; G = O, S, p = 0, 1, 2; R13 = (cyclo)alkyl, alkenyl, mono- or bicyclic heterocyclyl, etc.; R14 = cycloalkyl, mono- or bicyclic heterocyclyl, (substituted) aryl; R11, R12 = H; or R11R12 = O; A = O, CH2; Z = R17(CH2)rCH(NR16)U; U = CO, CH2, CH2CO; r = 1 when U = CO, CH2; r = 0 when U = CH2CO; R16 = H, alkyl; R17 (prodrug ester of) CO2H; Q = NR23CR24R26(CH2)sR25; s = 1, 2; R23 = H, alkyl; R24 = H, Me; or R23R24 = (CH2)3; R25 = aryl, mono- or bicyclic heterocyclyl, cycloalkyl; R26 = (substituted) carbamoyl] were prepared Thus, title peptide I, prepared by

solution phase methods, inhibited feeding in rats with ED50 = 1.3 nmole/kg i.p.  
 IT 53120-53-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as intermediate for cholecystokinin agonists)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3</sup>,7]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 60 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:194835 CAPLUS  
 DOCUMENT NUMBER: 116:194835  
 TITLE: Amide bond replacements incorporated into CCK-B selective "dipeptoids"  
 AUTHOR(S): Fincham, Christopher I.; Higginbottom, Michael; Hill, David R.; Horwell, David C.; O'Toole, John C.; Ratcliffe, Giles S.; Rees, David C.; Roberts, Edward  
 CORPORATE SOURCE: Parke-Davis Neuroscience Research Centre, Cambridge, CB2 2QB, UK  
 SOURCE: Journal of Medicinal Chemistry (1992), 35(8), 1472-84  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 116:194835  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB This paper describes the chemical synthesis and CCK-B (CCK = cholecystokinin) and CCK-A receptor binding affinities of a series of compds. in which the central amide bond of the CCK-B "dipeptoid" ligands I (2Adoc = 2-adamantylloxycarbonyl) (CCK-B IC50 = 952 nM) and II CCK-B IC50 = 32 nM) is replaced by 11 different amide replacements. These replacements are the methyleneamino (CH2NH), the reverse amide (NHCO), the ester (COO), the N-methylamide (CONMe), the thioamide (CSNH), the N-acetylmethyleneamino (CH2NAc), the cis double bond (CHCH), the ethylene (CH2CH2), the thioester (COS), the hydroxyethylene (CHOHCH2), and a 4,5-dihydro-1,3-thiazole. Most of the replacements have weaker affinity and reduced selectivity for the CCK-B receptor than the parent amide. However, this affinity can be improved by appending a fumarate side chain to the phenethyl group, e.g. pseudopeptide III (CCK-B IC50 = 38.8 nM). Replacement of the amide of compound I with a 4,5-dihydro-1,3-thiazole gives pseudopeptide IV, which is selective for the CCK-A receptor (CCK-A IC50 = 125 nM, CCK-B IC50 = 2580 nM, ratio = 21). The methyleneamino and

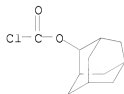
hydroxyethylene replacements, which have been used elsewhere as transition-state inhibitors of enzymes, are poor mimics of the amide in these CCK-B receptor ligands. Some of the steric, lipophilic, and hydrogen bonding properties of amide replacements incorporated into the simple amide, N-methylacetamide, have been quantified with the aid of mol. modeling. These data will contribute to the rational selection of amide bond replacements in other substrates.

IT 53120-53-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(acylation by, of D-tryptophan)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 61 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:559698 CAPLUS

DOCUMENT NUMBER: 115:159698

TITLE: Synthesis of an  $\alpha$ -CH<sub>2</sub>CO<sub>2</sub>H functionalized tryptophan and its incorporation into an analog of cholecystokinin

AUTHOR(S): Bourne, Gregory T.; Horwell, David C.; Pritchard, Martyn C.

CORPORATE SOURCE: Parke-Davis Res. Unit, Addenbrookes Hosp., Cambridge, CB2 2QB, UK

SOURCE: Tetrahedron (1991), 47(26), 4763-74

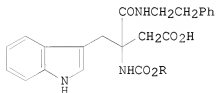
CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal

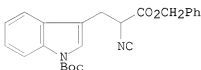
LANGUAGE: English

OTHER SOURCE(S): CASREACT 115:159698

GI



I



II

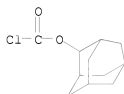
AB The synthesis of  $\alpha,\alpha$ -disubstituted tryptophan derivative I (R = 2-adamantyl) predicted by computer assisted mol. modeling to have close structural and conformational analogy to the endogenous neuropeptide

cholecystokinin, is described. Central to the synthesis of I is the alkylation of tryptophan isonitrile derivative II (Boc = Me<sub>3</sub>CO<sub>2</sub>C).

IT 53120-53-9, 2-Adamantylchloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (condensation of, with with (carboxymethyl)tryptophan derivs.)

RN 53120-53-9 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 62 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:450307 CAPLUS

DOCUMENT NUMBER: 115:50307

TITLE: Preparation of N-substituted cycloalkyl and polycycloalkyl  $\alpha$ -substituted tryptophanylphenylalanine analogs as drugs

INVENTOR(S): Horwell, David Christopher; Pritchard, Martyn Clive; Richardson, Reginald Stewart; Roberts, Edward; Aranda, Julian

PATENT ASSIGNEE(S): Warner-Lambert Co., USA

SOURCE: Eur. Pat. Appl., 133 pp.  
 CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 405537	A1	19910102	EP 1990-112333	19900628
EP 405537	B1	20040908		
R: GR				
WO 9100274	A1	19910110	WO 1990-US3553	19900628
W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, RO, SD, SE, SU, US, US, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, DK, ES, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
AU 9059628	A	19910117	AU 1990-59628	19900628
AU 644088	B2	19931202		
ZA 9005057	A	19920226	ZA 1990-5057	19900628
EP 479910	A1	19920415	EP 1990-911185	19900628
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
JP 04506079	T	19921022	JP 1990-510126	19900628
JP 2972331	B2	19991108		
CA 2060652	C	20010821	CA 1990-2060652	19900628
CA 2344707	C	20020730	CA 1990-2344707	19900628
AT 275546	T	20040915	AT 1990-112333	19900628
ES 2229202	T3	20050416	ES 1990-112333	19900628

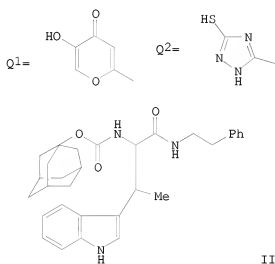
CN 1049165	A	19910213	CN 1990-106804	19900629
FI 106197	B1	20001215	FI 1991-6060	19911220
NO 9105122	A	19920227	NO 1991-5122	19911227
NO 301831	B1	19971215		

PRIORITY APPLN. INFO.:

US 1989-374327	A	19890629
US 1989-422486	A	19891016
US 1990-530811	A	19900605
CA 1990-2060652	A3	19900628
WO 1990-US3553	A	19900628

OTHER SOURCE(S): MARPAT 115:50307

GI

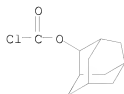


AB R1ANHCR2(CH2X)CONR9CR3R12CR4R13Ar [I; R1 = (substituted) (poly)cycloalkyl; A = (CH2)nCO, SO, SO2 NHCO, HC:CHCO, etc.; n = 0-6; R2 = alkyl, HC:CH2, C.tplbond.CH, CH2CH:CH2, CH2C.tplbond.CH, CH2Ar, etc.; R3, R4 = H, R2, CH2mBD; m = 0-3; B = bond, O2C(CH2)n, O(CH2)n, SO2(CH2)n, NHCOC:CH, etc.; D = cyano, carbamoyl, H, OH, Q1, Q2, etc.; R12, R13 = H; R12R13 = bond; Ar = (substituted) (polycyclic) (hetero) aryl; X = indolyl], were prepared as drugs. Thus, N-[(tricyclo[3.3.1.1.3,7]dec-1-yloxy)carbonyl]- $\alpha$ -methyl-DL-tryptophan (preparation from  $\alpha$ -methyl-DL-tryptophan and 1-adamantyl fluoroformate given) in dioxane was treated successively with pentachlorophenol, DCC, and PhCH2CH2NH2 to give 49% title compound II. I displaced tritiated pentagastrin from CCK receptors in rat cortex preps. with Ki = 0.00008-21.2  $\mu$ m. I are useful as appetite suppressants, gastric acid secretion inhibitors/ulcer inhibitors, anxiolytics, antipsychotics, opioid potentiators, and for treating drug withdrawal reactions.

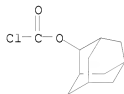
IT 53120-53-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as intermediates for tryptophanylphenylalanine analog)

RN 53120-53-9 CAPLUS

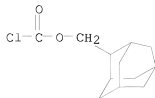
CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



IT 53120-53-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in preparation of tryptophanylphenylalanine derivative)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



L13 ANSWER 63 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1985:422197 CAPLUS  
 DOCUMENT NUMBER: 103:22197  
 ORIGINAL REFERENCE NO.: 103:3651a,3654a  
 TITLE: Adamantane-type carbamates  
 AUTHOR(S): Novikova, M. I.; Kozlov, O. F.  
 CORPORATE SOURCE: USSR  
 SOURCE: Vestn. Kiev. Politekhn. In-ta. Khim. Mashinostr. i  
 Tekhnol. (1984), (21), 6-9  
 From: Ref. Zh., Khim. 1985, Abstr. No. 2Zh144  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 OTHER SOURCE(S): CASREACT 103:22197  
 AB Title only translated.  
 IT 97042-08-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction of, with amines, carbamates by)  
 RN 97042-08-5 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-ylmethyl ester (CA INDEX  
 NAME)



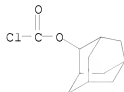
L13 ANSWER 64 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1983:488367 CAPLUS  
 DOCUMENT NUMBER: 99:88367  
 ORIGINAL REFERENCE NO.: 99:13637a,13640a  
 TITLE: Phosphonoformic acid esters and pharmaceutical compositions containing same  
 INVENTOR(S): Helgstrand, Aake J. E.; Johansson, Karl N.; Misiorny, Alfons; Noren, Jan O.; Stening, Goeran B.  
 PATENT ASSIGNEE(S): Astra Laekemedel AB, Swed.  
 SOURCE: U.S., 27 pp. Cont.-in-part of U.S. Ser. No. 971,896, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4386081	A	19830531	US 1979-93167	19791113
AU 7842681	A	19790628	AU 1978-42681	19781219
AU 520338	B2	19820128		
AT 7809216	A	19820415	AT 1978-9216	19781222
AT 369016	B	19821125		
CA 1156651	A2	19831108	CA 1981-388467	19811021
US 4591583	A	19860527	US 1982-450656	19821217
PRIORITY APPLN. INFO.:			GB 1977-53580	A 19771222
			GB 1977-53581	A 19771222
			GB 1977-53582	A 19771222
			GB 1977-53583	A 19771222
			GB 1978-28548	A 19780703
			GB 1978-28552	A 19780703
			GB 1978-28553	A 19780703
			GB 1978-28555	A 19780703
			US 1978-971896	A2 19781221
			CA 1978-317487	A3 19781206
			US 1979-93167	A3 19791113

OTHER SOURCE(S): MARPAT 99:88367

AB About 37 examples of RIOP(O)(OR2)CO2R3 (R1 = H, C1-6 alkyl, C3-6 cycloalkyl, cycloalkylalkyl, 1- and 2-adamantyl, PhCH2; R2 = H, 1-adamantyl; R3 = H, PhCH2) and their physiol. acceptable salts, useful as virucides, were prepared. For example, 4-MeOC6H4O2CCl was added dropwise to (EtO)3P and the mixture heated to 120° for 1.5 h and left at room temperature overnight to give 89% (EtO)2P(O)CO2C6H4OMe-4 (I). I at 500 µM gave 69% inhibition of influenza (WSN Wilson Smith Neurotropic type A.) plaque (34°, 4 days).

IT 53120-53-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction with phosphites)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)

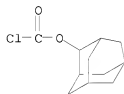


L13 ANSWER 65 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:42112 CAPLUS  
 DOCUMENT NUMBER: 92:42112  
 ORIGINAL REFERENCE NO.: 92:7033a,7036a  
 TITLE: Aliphatic derivatives of phosphonoformic acid,  
 pharmaceutical compositions and methods for combating  
 virus infections  
 INVENTOR(S): Helgstrand, Ake John Erik; Johansson, Karl Nils  
 Gunnar; Misiorny, Alfons; Noren, Jan Olof; Stening,  
 Goeran Bertil  
 PATENT ASSIGNEE(S): Astra Lakemedel AB, Swed.  
 SOURCE: Eur. Pat. Appl., 106 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 3007	A2	19790711	EP 1978-850028	19781219
EP 3007	A3	19790808		
EP 3007	B1	19790711		
R: BE, CH, DE, FR, GB, IT, LU, NL, SE				
CA 1140049	A1	19830125	CA 1978-317487	19781206
CA 1144937	A1	19830419	CA 1978-317520	19781206
DK 7805641	A	19790623	DK 1978-5641	19781215
DK 148631	B	19850819		
DK 148631	C	19860303		
DK 7805642	A	19790623	DK 1978-5642	19781215
DK 148632	B	19850819		
DK 148632	C	19860303		
AU 7842681	A	19790628	AU 1978-42681	19781219
AU 520338	B2	19820128		
AU 7842682	A	19790628	AU 1978-42682	19781219
AU 530031	B2	19830630		
FI 7803931	A	19790623	FI 1978-3931	19781220
FI 65438	B	19840131		
FI 65438	C	19840510		

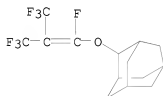


FI 7803932	A	19790623	FI 1978-3932	19781220
FI 68626	B	19850628		
FI 68626	C	19851010		
NO 7804330	A	19790625	NO 1978-4330	19781221
NO 154751	B	19860908		
NO 154751	C	19861217		
NO 7804331	A	19790625	NO 1978-4331	19781221
NO 156611	B	19870713		
NO 156611	C	19871021		
JP 54106431	A	19790821	JP 1978-158399	19781222
JP 63030885	B	19880621		
JP 54109951	A	19790829	JP 1978-158398	19781222
JP 62054118	B	19871113		
AT 7809216	A	19820415	AT 1978-9216	19781222
AT 369016	B	19821125		
AT 7809217	A	19820415	AT 1978-9217	19781222
AT 369017	B	19821125		
CA 1156651	A2	19831108	CA 1981-388467	19811021
PRIORITY APPLN. INFO.:			GB 1977-53580	A 19771222
			GB 1977-53581	A 19771222
			GB 1977-53582	A 19771222
			GB 1977-53583	A 19771222
			GB 1978-28548	A 19780703
			GB 1978-28552	A 19780703
			GB 1978-28553	A 19780703
			GB 1978-28555	A 19780703
			CA 1978-317487	A3 19781206
AB	Approx. 50 R1O(R2O)P(O)CO2R3 (I, R1, R2, = H, Na, C1-6 alkyl, C3-6 cycloalkyl, C4-6 cycloalkylalkyl, 1-, 2-adamantyl, PhCH2, R4R5C6H3, R4, R5 = H, halo, C1-3 alkyl, alkoxy, C2-7 alkoxycarbonyl, acyl; R3 = H, Na, C1-8 alkyl, C3-8 cycloalkyl, C4-8 cycloalkylalkyl, 1-, 2-adamantyl, PhCH2, R4R5C6H3) were prepared from (R1O)2P(OR2) and ClCO2R3. Thus, 0.12 mol P(OEt)3 was refluxed with ClCO2C6H4OMe-p to give 89% (EtO)2P(O)CO2C6H4OMe-p. At 500 $\mu$ M, (EtO)(p-MeOC6H4)P(O)CO2Ph gave 90% inhibition of herpes simplex type 1 plaque on Green Monkey Kidney cells.			
IT	53120-53-9P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction of, with phosphite, phosphonates from)			
RN	53120-53-9 CAPLUS			
CN	Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)			

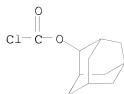


L13 ANSWER 66 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1978:152109 CAPLUS  
 DOCUMENT NUMBER: 88:152109  
 ORIGINAL REFERENCE NO.: 88:23957a,23960a

TITLE: Adamantyl perfluoroisobutenyl ethers  
 AUTHOR(S): Kryukov, L. N.; Vitkovskii, V. S.; Kryukova, L. Yu.;  
 Isaev, V. L.; Sterlin, R. N.; Knunyants, I. L.  
 CORPORATE SOURCE: USSR  
 SOURCE: Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva im. D.  
 I. Mendeleeva (1978), 23(1), 115  
 CODEN: ZVKOAG; ISSN: 0373-0247  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 AB Treating (F3C)2C:CF2 with ROH (R = 2-naphthyl, 1- and 2-adamantyl) and Na  
 gave 33-41% (F3C)2C:CFOR.  
 IT 66258-27-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 66258-27-3 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-[[1,3,3,3-tetrafluoro-2-(trifluoromethyl)-1-  
 propenyl]oxy]- (9CI) (CA INDEX NAME)



L13 ANSWER 67 OF 67 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1974:412781 CAPLUS  
 DOCUMENT NUMBER: 81:12781  
 ORIGINAL REFERENCE NO.: 81:2059a,2062a  
 TITLE: Chemistry of 2-substituted adamantanes. V.  
 Photolysis of 2-adamantyl azidoformate  
 Greidanus, J. W.  
 AUTHOR(S): Sch. Nat. Sci., Univ. Zambia, Lusaka, Zambia  
 CORPORATE SOURCE: Canadian Journal of Chemistry (1974), 52(7), 1062-5  
 SOURCE: CODEN: CJCHAG; ISSN: 0008-4042  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB Irradiation of 2-adamantyl azidoformate in cyclohexane gave 41% I by intermol.  
 insertion of the nitrene into the solvent. An intramol. insertion  
 product, shown by its ir spectrum to be a 5-membered cyclic carbamate, was  
 formed in 15% yield.  
 IT 53120-53-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 53120-53-9 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-2-yl ester (CA INDEX NAME)



=&gt; log h

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

366.11

1793.29

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-53.60

-183.20

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 16:52:50 ON 19 FEB 2008

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Welcome to STN International! Enter x:x

LOGINID:SSPTAJRK1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

```

NEWS 1      Web Page for STN Seminar Schedule - N. America
NEWS 2 OCT 02 CA/CAPlus enhanced with pre-1907 records from Chemisches
              Zentralblatt
NEWS 3 OCT 19 BEILSTEIN updated with new compounds
NEWS 4 NOV 15 Derwent Indian patent publication number format enhanced
NEWS 5 NOV 19 WPIX enhanced with XML display format
NEWS 6 NOV 30 ICSD reloaded with enhancements
NEWS 7 DEC 04 LINPADOCDB now available on STN
NEWS 8 DEC 14 BEILSTEIN pricing structure to change
NEWS 9 DEC 17 USPATOLD added to additional database clusters
NEWS 10 DEC 17 IMSDRUGCONF removed from database clusters and STN
NEWS 11 DEC 17 DGENE now includes more than 10 million sequences
NEWS 12 DEC 17 TOXCENTER enhanced with 2008 MeSH vocabulary in
              MEDLINE segment
NEWS 13 DEC 17 MEDLINE and LMEEDLINE updated with 2008 MeSH vocabulary
NEWS 14 DEC 17 CA/CAPlus enhanced with new custom IPC display formats
NEWS 15 DEC 17 STN Viewer enhanced with full-text patent content
              from USPATOLD

```

NEWS 16 JAN 02 STN pricing information for 2008 now available  
 NEWS 17 JAN 16 CAS patent coverage enhanced to include exemplified  
 prophetic substances  
 NEWS 18 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new  
 custom IPC display formats  
 NEWS 19 JAN 28 MARPAT searching enhanced  
 NEWS 20 JAN 28 USGENE now provides USPTO sequence data within 3 days  
 of publication  
 NEWS 21 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment  
 NEWS 22 JAN 28 MEDLINE and LMEEDLINE reloaded with enhancements  
 NEWS 23 FEB 08 STN Express, Version 8.3, now available  
 NEWS 24 FEB 20 PCI now available as a replacement to DPCI  
 NEWS 25 FEB 25 IFIREF reloaded with enhancements  
 NEWS 26 FEB 25 IMSPRODUCT reloaded with enhancements  
 NEWS 27 FEB 29 WFINDEX/WPIDS/WPIX enhanced with ECLA and current  
 U.S. National Patent Classification

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,  
 AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

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 NEWS LOGIN Welcome Banner and News Items  
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 result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:27:53 ON 05 MAR 2008

=> file reg  

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 08:28:07 ON 05 MAR 2008  
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STRUCTURE FILE UPDATES: 3 MAR 2008 HIGHEST RN 1006431-93-1  
 DICTIONARY FILE UPDATES: 3 MAR 2008 HIGHEST RN 1006431-93-1

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

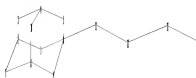
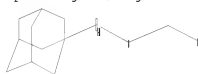
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10540547\Struc 4.str



chain nodes :

11 12 13 14

ring nodes :

1 2 3 4 5 6 7 8 9 10

chain bonds :

6-11 11-12 12-13 13-14

ring bonds :

1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10

exact/norm bonds :

1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10 11-12 12-13

exact bonds :

6-11 13-14

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

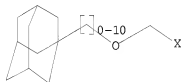
11:CLASS 12:CLASS 13:CLASS 14:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR

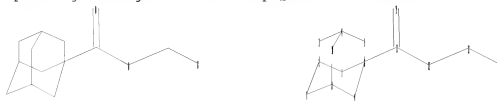


Structure attributes must be viewed using STN Express query preparation.

10540547.trn

=>

Uploading C:\Program Files\Stnexp\Queries\10540547\Struc 5.str



chain nodes :

11 12 13 14 15

ring nodes :

1 2 3 4 5 6 7 8 9 10

chain bonds :

6-11 11-12 11-15 12-13 13-14

ring bonds :

1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10

exact/norm bonds :

1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10 11-12 11-15 12-13

exact bonds :

6-11 13-14

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

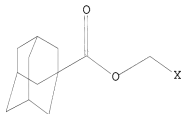
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

L2 STRUCTURE UPLOADED

=> d

L2 HAS NO ANSWERS

L2 STR

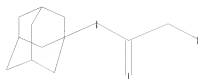


Structure attributes must be viewed using STN Express query preparation.

=>

Uploading C:\Program Files\Stnexp\Queries\10540547\Struc 6.str

10540547.trn



```

chain nodes :
11 12 13 14 15
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
6-11 11-12 12-13 12-15 13-14
ring bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10
exact/norm bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 6-11 7-8 8-9 8-10 11-12 12-15
exact bonds :
12-13 13-14

```

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

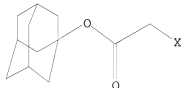
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L3 STRUCTURE UPLOADED

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=> d
L3 HAS NO ANSWERS
L3 STR

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Structure attributes must be viewed using STN Express query preparation.

```

=> 11 not 12 not 13
SAMPLE SEARCH INITIATED 08:28:49 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 82 TO ITERATE

```

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100.0% PROCESSED      82 ITERATIONS      4 ANSWERS
SEARCH TIME: 00.00.01

```

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FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH  **COMPLETE**
PROJECTED ITERATIONS:   1097 TO 2183
PROJECTED ANSWERS:      4 TO 200

```

10540547.trn

L4 4 SEA SSS SAM L1 NOT L2 NOT L3

=> l1 not l2 not l3 full

FULL SEARCH INITIATED 08:28:53 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1596 TO ITERATE

100.0% PROCESSED 1596 ITERATIONS

31 ANSWERS

SEARCH TIME: 00.00.01

L5 31 SEA SSS FUL L1 NOT L2 NOT L3

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

178.36

178.57

FILE 'CAPLUS' ENTERED AT 08:28:57 ON 05 MAR 2008

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=> l5

L6 149 L5

=> d scan

L6 149 ANSWERS CAPLUS COPYRIGHT 2008 ACS on STN

IC ICM C07C271-22

ICS C07C271-34; C07C275-26; C07C279-18; C07D295-18; A61K031-325; A61P007-02

CC 34-2 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1, 63

TI Synthesis of arginine mimetics as factor Xa inhibitors for use in anti-coagulation or antitumor therapy or as diagnostic material

ST amino acid amidine deriv prepn factor Xa inhibitor anticoagulant;

antitumor factor Xa inhibitor prepn amino acid amidine deriv; guanidine

amino acid deriv prepn factor Xa inhibitor anticoagulant



IT Enzyme kinetics  
(of inhibition; preparation of amino acid amidine or guanidine derivs. for use as factor Xa inhibitors for therapeutic or diagnostic use)

IT Anticoagulants  
Antitumor agents  
(preparation of amino acid amidine or guanidine derivs. for use as factor Xa inhibitors for therapeutic or diagnostic use)

IT Amidines  
Amino acids, preparation  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of amino acid amidine or guanidine derivs. for use as factor Xa inhibitors for therapeutic or diagnostic use)

IT Amines, preparation  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of amino acid amidine or guanidine derivs. for use as factor Xa inhibitors for therapeutic or diagnostic use)

IT 9002-05-5, Blood-coagulation factor Xa  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(preparation of amino acid amidine or guanidine derivs. for use as factor Xa inhibitors for therapeutic or diagnostic use)

IT 291535-81-4P 291535-82-5P 291535-83-6P 291535-84-7P 291535-91-6P  
291535-95-0P 291535-96-1P 291535-97-2P 291535-99-4P 291536-00-0P  
354112-28-0P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of amino acid amidine or guanidine derivs. for use as factor Xa inhibitors for therapeutic or diagnostic use)

IT 354112-29-1 354112-30-4 354112-31-5 354112-32-6 354112-33-7  
354112-34-8 354112-35-9 354112-36-0  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(preparation of amino acid amidine or guanidine derivs. for use as factor Xa inhibitors for therapeutic or diagnostic use)

IT 64-04-0, 2-Phenethylamine 100-46-9, Benzylamine, reactions 107-10-8,  
1-Propanamine, reactions 110-89-4, Piperidine, reactions 2922-40-9,  
DL-(4-Nitro)phenylalanine 4411-25-0, 1-Adamantylisocyanate 22888-47-7,  
DL-(4-Cyano)phenylalanine 57213-48-6, L-(3-Cyano)phenylalanine  
62087-82-5 63999-80-4, DL-(3-Cyano)phenylalanine 263396-43-6,  
D-(3-Cyano)phenylalanine 291535-98-3  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of amino acid amidine or guanidine derivs. for use as factor Xa inhibitors for therapeutic or diagnostic use)

IT 52117-07-4P 108450-75-5P 150447-32-8P 191872-32-9P 291535-79-0P  
291535-80-3P 291535-85-8P 291535-88-1P 291535-89-2P 291535-90-5P  
291535-92-7P 291535-93-8P 291535-94-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of amino acid amidine or guanidine derivs. for use as factor Xa inhibitors for therapeutic or diagnostic use)

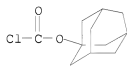
IT 52117-06-3P 291535-86-9P 291535-87-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of amino acid amidine or guanidine derivs. for use as factor Xa  
 inhibitors for therapeutic or diagnostic use)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

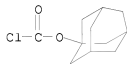
=> d ibib abs hitstr 141-149

L6 ANSWER 141 OF 149 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1971:509891 CAPLUS  
 DOCUMENT NUMBER: 75:109891  
 ORIGINAL REFERENCE NO.: 75:17351a,17354a  
 TITLE: Substitution reactions of bridgehead derivatives of  
 adamantane  
 AUTHOR(S): Kevill, Dennis N.; Weitl, Frederick L.; Sister  
 Virginia M. Horvath  
 CORPORATE SOURCE: Dep. Chem., North. Illinois Univ., DeKalb, IL, USA  
 SOURCE: Preprints - American Chemical Society, Division of  
 Petroleum Chemistry (1970), 15(2), B66-B70  
 CODEN: ACPCAT; ISSN: 0569-3799  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB In addition to reactions proceeding by conventional ionization mechanisms,  
 nucleophilic substitution reactions considered include the decomposition of  
 1-adamantyl chloroformate in inert aprotic solvents, the competing  
 solvolysis-decomposition of 1-adamantyl chloroformate in both protic and  
 aprotic solvents, and the electrophilically assisted reactions of  
 1-adamantyl halides with alc. AgNO<sub>3</sub> and silver perchlorate. The thermal  
 reactions of 1-adamantyl chloroglyoxalate are discussed.  
 IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (solvolysis of)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)

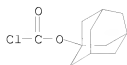


L6 ANSWER 142 OF 149 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1971:141834 CAPLUS  
 DOCUMENT NUMBER: 74:141834  
 ORIGINAL REFERENCE NO.: 74:22923a,22926a  
 TITLE: Antibiotic 7- $\alpha$ -aminoacyl cephalosporins  
 INVENTOR(S): Morin, Robert B.  
 PATENT ASSIGNEE(S): Eli Lilly and Co.  
 SOURCE: U.S., 7 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

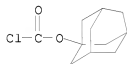
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3560489	A	19710202	US 1966-571966	19660812
PRIORITY APPLN. INFO.:				US 1966-571966	A 19660812
AB	The title compds. were prepared by the acylation of 7-amino-cephalosporanic acid (I). Thus, N-carbobenzoxy-D-phenylglycine in dry THF was treated with Et3N and ClCO2Bu-iso. I and Et3N in THF and H2O was added to the mixture to give 7-(N-carbobenzoxy-D- $\alpha$ -aminophenylacetamido)cephalosporanic acid (II). H was bubbled into II and 5% Pd-C in 95% EtOH at room temperature to yield 7-(D- $\alpha$ -aminophenylacetamido)cephalosporanic acid. Other analogs were prepared by conventional acylation procedures.				
IT	5854-52-4P				
	RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)				
RN	5854-52-4 CAPLUS				
CN	Carbonochloridic acid, tricyclo[3.3.1.1 <sup>3,7</sup> ]dec-1-yl ester (CA INDEX NAME)				



L6 ANSWER 143 OF 149 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1971:124417 CAPLUS  
 DOCUMENT NUMBER: 74:124417  
 ORIGINAL REFERENCE NO.: 74:20107a,20110a  
 TITLE: Competing solvolysis-decomposition of 1-adamantyl chloroformate  
 AUTHOR(S): Kevill, Dennis N.; Weitl, Frederick L.  
 CORPORATE SOURCE: Dep. Chem., North. Illinois Univ., DeKalb, IL, USA  
 SOURCE: Tetrahedron Letters (1971), (9), 707-10  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB In alc. solns. I (X = O2CCl) undergoes 2 competing reactions: solvolysis with the formation of 1-adamantyl alkyl carbonates and decomposition to I carbonium ion (II), Cl<sup>-</sup>, and CO<sub>2</sub>. The decomposition is followed by the recombination of II with Cl<sup>-</sup> and by II reaction with the solvent giving an ether. The ethers are not formed from the carbonates. The activation entropies of I (X = O2CCl) solvolysis-decomposition are 16-20 entropy units more pos. than the solvolysis entropies of I (X = halide) in alcs., due to the loss of CO<sub>2</sub> preceding or concurrent with II formation and I ionization. In dioxane, EtOH, MeOH, or acetone the solvolysis amts. to 55.5-80% of I solvolysis-decomposition process.  
 IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (solvolysis of, mechanism of)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



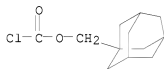
L6 ANSWER 144 OF 149 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1971:12327 CAPLUS  
 DOCUMENT NUMBER: 74:12327  
 ORIGINAL REFERENCE NO.: 74:1993a,1996a  
 TITLE: Solvolysis of 1-adamantyl chloroformate and related compounds in protic and aprotic media  
 AUTHOR(S): Weitz, Frederick L.  
 CORPORATE SOURCE: Northern Illinois Univ., DeKalb, IL, USA  
 SOURCE: (1969) 167 pp. Avail.: 70-3456  
 From: Diss. Abstr. Int. B 1970, 30(9), 4070  
 DOCUMENT TYPE: Dissertation  
 LANGUAGE: English  
 AB Unavailable  
 IT 5854-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (solvolysis of)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1,3,7]dec-1-yl ester (CA INDEX NAME)



L6 ANSWER 145 OF 149 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1969:58138 CAPLUS  
 DOCUMENT NUMBER: 70:58138  
 ORIGINAL REFERENCE NO.: 70:10937a,10940a  
 TITLE: 1-Adamantyl- and 1-adamantylmethyl carbonates of testosterone  
 INVENTOR(S): Boswell, George A., Jr.  
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.  
 SOURCE: S. African, 27 pp.  
 CODEN: SFXAB  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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ZA 6706588		19680308	ZA	
DE 1668559			DE	
FR 1579481			FR	
FR 7327			FR	

GB 1187611 GB  
 GB 1187659 GB  
 GB 1187660 GB  
 US 3433813 19690318 US 19661129  
 PRIORITY APPLN. INFO.: US 19661129  
 OTHER SOURCE(S): MARPAT 70:58138  
 AB Anabolic-androgenic agents were prepared 19-Nortestosterone (25.0 g.) in 100 cc. CH<sub>2</sub>Cl<sub>2</sub> was shaken with 75 g. carbonyl fluoride under pressure 10 hrs. at 20 ± 2° to give 23.4 g. 19-nortestosterone fluoroformate (I), m. 83-3.5°; [α]<sub>D</sub><sup>20</sup> 34° (c 1.47, CHCl<sub>3</sub>). Similarly prepared was testosterone fluoroformate, m. 104-6°, [α]<sub>D</sub><sup>20</sup> 86° (c 2.33, CHCl<sub>3</sub>). I (1.0 g.) and 10 g. 1-adamantanemethanol in 75 cc. benzene containing 0.5 cc. pyridine was refluxed under N 24 hrs. to give 0.646 g. 19-nortestosterone 1'-adamantylmethyl carbonate, m. 142.5-3.5°, [α]<sub>D</sub><sup>20</sup> 42° (c 1.65, CHCl<sub>3</sub>). Similarly prepared was testosterone 1'-adamantylmethyl carbonate, m. 158-9°, [α]<sub>D</sub><sup>20</sup> 79° (c 1.32, CHCl<sub>3</sub>). Similarly prepared, from 1-adamantyl chloroformate (m. 52-3°; from 1-adamantol and phosgene) was 19-nortestosterone 1'-adamantyl carbonate, m. 167°, [α]<sub>D</sub><sup>20</sup> 35° (c 1.43, CHCl<sub>3</sub>). Phosgene was bubbled through 400 cc. Et<sub>2</sub>O 2 hrs. at 0°, the solution diluted to 800 cc. with Et<sub>2</sub>O, 100 g. adamantane-1-methanol added, and the mixture stirred 24 hrs. to give 1-adamantylmethyl chloroformate (II), m. 54-5°. Testosterone (13.0 g.) in benzene was refluxed with 12 g. II and 10 cc. pyridine 40 hrs. to give 15 g. 17β-hydroxy-4-androsten-3-one 1'-adamantylmethyl carbonate, m. 157-8°. Ir and uv spectral data were given for the compds.  
 IT 21317-84-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 21317-84-0 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1.3,7]dec-1-ylmethyl ester (CA INDEX NAME)



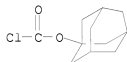
L6 ANSWER 146 OF 149 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1969:46538 CAPLUS  
 DOCUMENT NUMBER: 70:46538  
 ORIGINAL REFERENCE NO.: 70:8719a,8722a  
 TITLE: Kinetics and mechanism of the decomposition of 1-adamantyl chloroformate  
 AUTHOR(S): Kevill, Dennis N.; Weitl, Frederick L.  
 CORPORATE SOURCE: Northern Illinois Univ., DeKalb, IL, USA  
 SOURCE: Journal of the American Chemical Society (1968), 90(23), 6416-20  
 CODEN: JACSAT; ISSN: 0002-7863  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 70:46538

AB 1-Adamantyl chloroformate decompose in decane or in the molten phase to give exclusively 1-adamantyl chloride. In benzene a very small amount of acid formation occurs, 0.5% at 54.2°, and a 94% yield of 1-adamantyl chloride. Increased, but still small amts. of acid production accompany decomposition in nitrobenzene and mixts. of nitrobenzene with benzene. From a reaction with Ag hexafluoroantimonate in nitrobenzene, 1-(m-nitrophenyl)adamantane was isolated and characterized. At 54.2°, the relative rates of decomposition of 0.06M solns. in decane, benzene, and nitrobenzene are 1:1260:-205,000. In benzene, the entropy of a citation is -12.0 entropy units and slightly less neg. values are obtained in nitrobenzene and benzene-nitrobenzene mixts.; similar values were reported for SN1 solvolyses of 1-adamantyl halides. In nitrobenzene, tetra-n-butylammonium chloride modestly accelerates the decomposition, and the extent of acid formation decreases in a manner consistent with the rate of solvolysis in the absence of added chloride (3.0% at 15.0°) being equal to the rate of production of dissociated 1-adamantyl carbonium ions.

IT 5854-52-4  
RL: PRP (Properties)  
(dissociation of, kinetics of)

RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L6 ANSWER 147 OF 149 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1968:451736 CAPLUS

DOCUMENT NUMBER: 69:51736

ORIGINAL REFERENCE NO.: 69:9643a,9646a

TITLE: 1-Adamantyl carbazates

INVENTOR(S): Gerzon, Koert; Krumkalns, Eriks V.

PATENT ASSIGNEE(S): Lilly, Eli and Co.

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3369041	A	19680213	US 1967-615356	19670213
			US 1967-615356	A 19670213

## PRIORITY APPLN. INFO.:

GI For diagram(s), see printed CA Issue.

AB I, where R is Cl and n is 1 and 2, are treated with N<sub>2</sub>H<sub>4</sub> to give the title compds. Thus, a mixture of 21 g. 1-bromoadamantane, 50 ml. 85% N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O, and 150 ml. EtOH is refluxed 10 hrs. to give 12.6 g. 1-hydroxyadamantane (II), m. 220°. A mixture of 8 g. II, 6 g. pyridine, and 200 ml. ether is added in 1 hr. to a solution of 20 g. COCl<sub>2</sub> in 100 ml. C<sub>6</sub>H<sub>6</sub> at 20° to give 1-adamantyl chloroformate (III), m. 46-7°. Similarly prepared are (m.p. given): 3,5-dimethyl-1-adamantyl chloroformate,

5-10°; 3-homoadamantyl chloroformate, <0°. A solution of 75 mg. III in 25 ml. C6H6 is saturated 1 hr. with NH3 gas to give 1-adamantyl carbamate I (n = 1, R = NH2, R1 = H), m. 170-1°. Similarly prepared are (m.p. given): I (n = 1, R = NHMe, R1 = H), 127-9°; I (n = 1, R = adamantylamino, R1 = H), 305-10°. A solution of 2 g. III in 150 ml. C6H6 is slowly added to a solution of 2.5 g. N2H4 in 20 ml. tert-BuOH and the mixture is agitated 2 hrs. and worked up to give 1-adamantyl carbamate [I (n = 1, R = NHHNH2, R1 = H)] (IV), m. 141-2°. Similarly prepared are (m.p. given): I (n = 1, R = NHHNH2, R1 = Me), 74-5°; V, -; I (n = 2, R = NHHNH2, R1 = H), 67°. A mixture of 100 mg. IV, 1 ml. 2N HCl, and 2 ml. Me2CO is treated with 40 mg. NaNO2, the mixture is agitated until the NaNO2 is dissolved, 2 ml. water is added, and the water-insol. material obtained is extracted with hexane to give I (n = 1, R = N3, R1 = H). A

solution

of Na D-phenylglycinate is prepared from 151 mg. D-phenylglycine, 2 ml. water, and 1.2 ml. N NaOH at 0°, a solution of 225 mg. III in a mixture of 2.5 ml. dioxane and 1 ml. ether is added in 40 min. as the mixture is kept alkaline (N NaOH), the mixture is extracted with ether, and the aqueous

phase is

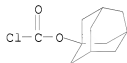
cooled to 0° and worked up to give 228 mg. N-(1-adamantyloxycarbonyl)-D-phenylglycine, m. 119-21°. Similarly prepared is I (n = 1, R = NHCH2CO2H, R1 = H), m. 141-2.5° (hexane).

IT 5854-52-4P 10144-56-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

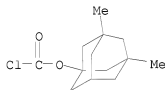
RN 5854-52-4 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



RN 10144-56-6 CAPLUS

CN Carbonochloridic acid, 3,5-dimethyltricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



L6 ANSWER 148 OF 149 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1966:499665 CAPLUS

DOCUMENT NUMBER: 65:99665

ORIGINAL REFERENCE NO.: 65:18683h,18684a-b

TITLE: Adamantyl compounds

PATENT ASSIGNEE(S): Eli Lilly & Co.

SOURCE: 8 pp.

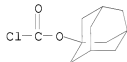
DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6600403		19660722	NL 1966-403	19660112
PRIORITY APPLN. INFO.:			US	19650121

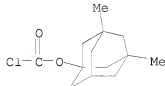
AB New adamantyloxycarbonyl derivs. (I) of  $\alpha$ -amino acids were prepared I includes derivs. of naturally occurring  $\alpha$ -amino acids and is a suitable blocking group in synthesis of peptides, penicillins, or cephalosporins. This blocking group can be removed with F3CCO2H, anhydrous HCl, or by other known methods. Thus, to 20 g. COC12 in 100 ml. anhydrous C6H6, a mixture of 8 g. 1-hydroxyadamantane, 6 g. pyridine, and 200 ml. ether was added dropwise at .apprx.20° during 1 hr. to give 1-adamantyl chloroformate, m. 46-7°. Similarly, 3,5-dimethyl-1-hydroxyadamantyl chloroformate, m. .apprx.5-10°, and 3-hydroxyhomadamantyl chloroformate, m. .apprx.0°, were prepared To 151 mg. D-phenylglycine in 2 ml. H2O and 1.2 ml. N NaOH, a solution of 225 mg. 1-adamantyl chloroformate in 2.5 ml. dioxane and 1 ml. ether was added in 5 portions during 40 min. After addition of 1 ml. N NaOH, the reaction mixture was extracted with ether, acidified with 85% H3PO4 to pH 4.5, and extracted with ether to give N-(1-adamantyloxycarbonyl)-D-phenylglycine, m. 119-20°. Also prepared was the glycine analog, m. 141-2.5°.

IT 5854-52-4P, Formic acid, chloro-, 1-adamantyl ester  
 10144-56-6P, 1-Adamantanol, 3,5-dimethyl-, chloroformate  
 10144-78-2P, 1-Adamantanol, 3-methyl-, chloroformate  
 RL: PREP (Preparation)  
 (preparation of)

RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



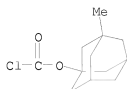
RN 10144-56-6 CAPLUS  
 CN Carbonochloridic acid, 3,5-dimethyltricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



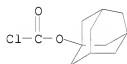
RN 10144-78-2 CAPLUS  
 CN Carbonochloridic acid, 3-methyltricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA



INDEX NAME)



L6 ANSWER 149 OF 149 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1966:104659 CAPLUS  
 DOCUMENT NUMBER: 64:104659  
 ORIGINAL REFERENCE NO.: 64:19757h,19758a  
 TITLE: Adamantyloxycarbonyl, a new blocking group.  
 Preparation of 1-adamantyl chloroformate  
 Haas, W. L.; Krumkalns, E. V.; Gerzon, K.  
 AUTHOR(S): Lilly Res. Labs., Eli Lilly & Co., Indianapolis, IN  
 CORPORATE SOURCE: Journal of the American Chemical Society (1966),  
 SOURCE: 88(9), 1988-92  
 CODEN: JACSAT; ISSN: 0002-7863  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 64:104659  
 AB 1-Adamantyl chloroformate was prepared from 1-adamantanol and COCl<sub>2</sub>. The chloroformate was allowed to react with amino acids to give the corresponding 1-adamantyloxycarbonyl derivs. Several of them could be obtained in crystalline form, while the corresponding tert-butyloxycarbonyl derivs. have either not been reported or have been described as oils or amorphous solids. The adamantyloxycarbonylamino acids are cleaved by acid-catalyzed solvolysis with CF<sub>3</sub>CO<sub>2</sub>H to yield the free amino acids. Adamantyl chloroformate forms mixed carbonic-carboxylic anhydrides with Et<sub>3</sub>N salts of N-protected amino acids which give peptide derivs. on reaction with amino acid esters.  
 IT 5854-52-4P, Formic acid, chloro-, 1-adamantyl ester  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 5854-52-4 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester (CA INDEX NAME)



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 DICTIONARY FILE UPDATES: 3 MAR 2008 HIGHEST RN 1006431-93-1

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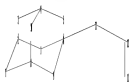
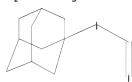
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<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

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chain nodes :
11 12 13
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
6-11 11-12 12-13
ring bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10
exact/norm bonds :
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Match level :

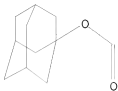
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 11:CLASS 12:CLASS 13:CLASS

L7 STRUCTURE UPLOADED

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L7 HAS NO ANSWERS

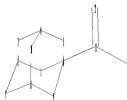
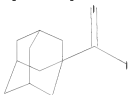
L7 STR



Structure attributes must be viewed using SIN Express query preparation.

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11 12 13

ring nodes :

1 2 3 4 5 6 7 8 9 10

chain bonds :

6-11 11-12 11-13

ring bonds :

1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10

exact/norm bonds :

1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10 11-12 11-13

exact bonds :

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Match level :

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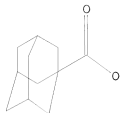
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L8 STRUCTURE UPLOADED

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L8 HAS NO ANSWERS

L8 STR



Structure attributes must be viewed using STN Express query preparation.

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 FULL SCREEN SEARCH COMPLETED - 1596 TO ITERATE

100.0% PROCESSED 1596 ITERATIONS 25 ANSWERS  
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L9 25 SEA SSS FUL L1 NOT L7 NOT L8

=> file caplus  
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ENTRY	SESSION
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FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-6.40

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L10 40 L9

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L10 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:935060 CAPLUS

DOCUMENT NUMBER: 147:288278

TITLE: Preparation of adamantane based molecular glass photoresists for sub-200 nm immersion lithography

INVENTOR(S): Tanaka, Shinji; Ober, Christopher K.

PATENT ASSIGNEE(S): Cornell Research Foundation, Inc., USA; Idemitsu Kosan Co., Ltd.

SOURCE: PCT Int. Appl., 41pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007094784	A1	20070823	WO 2006-US5378	20060216
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.:

WO 2006-US5378

20060216

AB Disclosed are glass photoresists generated from adamantane derivs. containing acetal and/or ester moieties as novel high-performance photoresist materials. Some of the disclosed adamantane-based glass resists have a tripodal structure and other disclosed adamantane-based glass resists include one or more cholic groups. The disclosed adamantane derivs. can be synthesized from starting materials which are com. available. By way of example only, one of many disclosed amorphous glass photoresists has the following structure: GR-5 Adamantane-1,3,5-triyltris(oxyethylene) tricholate.

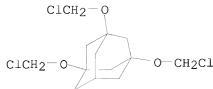
IT 946578-92-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of adamantane based mol. glass photoresist for immersion lithog.)

RN 946578-92-3 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1,3,5-tris(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2006:101708 CAPLUS

DOCUMENT NUMBER: 144:193289

TITLE: Fluorine-containing polymers with good transparency for resist compositions and resist protective film compositions

INVENTOR(S): Takebe, Yoko; Eda, Masataka; Yokokoji, Osamu; Sasaki, Takashi

PATENT ASSIGNEE(S): Asahi Glass Company, Limited, Japan

SOURCE: PCT Int. Appl., '72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006011427	A1	20060202	WO 2005-JP13507	20050722
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1772468	A1	20070411	EP 2005-766146	20050722
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1993393	A	20070704	CN 2005-80025573	20050722
US 2007154844	A1	20070705	US 2007-626913	20070125
KR 2007038533	A	20070410	KR 2007-702233	20070129
PRIORITY APPLN. INFO.:				
			JP 2004-223363	A 20040730
			JP 2004-340595	A 20041125
			JP 2005-151028	A 20050524
			WO 2005-JP13507	W 20050722

AB Title polymers are obtained by ring-forming polymerization of a fluorine-containing

diene CF<sub>2</sub>:CFCF<sub>2</sub>C(CF<sub>3</sub>)(OR<sub>1</sub>)(CH<sub>2</sub>)<sub>n</sub>CR<sub>2</sub>:CHR<sub>3</sub>, wherein R<sub>1</sub> = H, C<sub>s</sub>20

alkyl, or (CH<sub>2</sub>)<sub>a</sub>COOR<sub>4</sub>; R<sub>2</sub>, R<sub>3</sub> = independently H or C<sub>s</sub>12 alkyl; R<sub>4</sub> =

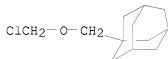
H or Cs20 alkyl; a = 0 or 1; and n = 0 or 2 (when n = 0,  $\geq 1$  of R1, R2, R3  $\neq$  H). Thus, 254 g 68% 4,5-dichloro-1,1,1,3,3,4,5,5-octafluoro-2-pentanone solution was mixed with 1 M vinylmagnesium bromide at 0° for 60 min and at room temperature for 16 h, 234 g of the resulting 5,6-dichloro-4,4,5,6,6-pentafluoro-3-(trifluoromethyl)-1-hexen-3-ol was mixed with 47 g zinc and stirred, 20 g zinc was added therein and stirred for 36 h to give 4,4,5,6,6-pentafluoro-3-(trifluoromethyl)-1,5-hexadien-3-ol, 4.50 g of which was polymerized in the presence of 9.02 g 3% perfluorobutyl peroxide at 20° for 18 h to give a cyclized fluoropolymer with weight average mol. weight 18,200, polydispersity 2.19, and glass transition temperature 86°, 1 g of the resulting polymer was dissolved in 10 g 2-heptanone, filtered, applied on a silicon wafer, and dried at 100° for 90 s to give a resist protective coating, showing light transmittance 99.3% at 193 nm and 79.4% at 157 nm.

IT 720682-48-4DP, reaction products with hydroxy-containing cyclic fluoropolymers

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(fluorine-containing polymers with good transparency for resist compns. and resist protective film compns.)

RN 720682-48-4 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1314037 CAPLUS

DOCUMENT NUMBER: 144:52079

TITLE: Photoresists comprising polymers derived from

fluoroalcohol-substituted polycyclic monomers  
Crawford, Michael Karl; Tran, Hoang Vi; Schadt, Frank L., III; Zumsteg, Frederick Claus, Jr.; Feiring, Andrew Edward; Fryd, Michael

PATENT ASSIGNEE(S): E.I. DuPont De Nemours and Company, USA

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

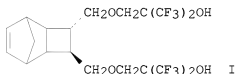
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005118656	A2	20051215	WO 2005-US17325	20050517
WO 2005118656	A3	20060112		

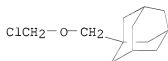
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LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,  
 NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,  
 SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,  
 ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,  
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG

US 2007207413 A1 20070906 US 2006-578278 20061011  
 PRIORITY APPLN. INFO.: US 2004-572734P P 20040520  
 WO 2005-US17325 W 20050517  
 OTHER SOURCE(S): MARPAT 144:52079  
 GI



- AB The invention relates to unsatd. polycyclic compds. containing two fluoroalc. substituents. The invention also relates to homopolymers and copolymers derived from such unsatd. polycyclic compds. The copolymers are useful for photoimaging compns. and, in particular, photoresist compns. (pos.-working and/or neg.-working) for imaging in the production of semiconductor devices. The polymers are especially useful in photoresist compns. having high UV transparency (particularly at short wavelengths, e.g., 157 nm) which are useful as base resins in resists and potentially in many other applications. A typical polymer was manufactured by radical polymerization of 67.5 g fluorodiol I with 30 g tetrafluoroethylene in 1,1,3,3-pentafluorobutane.
- IT 720682-48-4DP, reaction products with polymers based on polycyclic monomers having 2 fluoroalc. groups  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (photoresists comprising polymers derived from polycyclic monomers having 2 fluoroalc. groups)
- RN 720682-48-4 CAPLUS
- CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



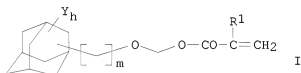
L10 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 2005:1241028 CAPLUS  
 DOCUMENT NUMBER: 143:485833  
 TITLE: Adamantane derivative, method for producing same and photosensitive material for photoresist



INVENTOR(S): Ito, Katsuki; Ono, Hidetoshi; Tanaka, Shinji;  
Hatakeyama, Naoyoshi; Miyamoto, Shinji; Matsumoto,  
Nobuaki  
PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 30 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005111097	A1	20051124	WO 2005-JP8943	20050517
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW</p> <p>RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG</p>				

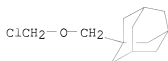
PRIORITY APPLN. INFO.: JP 2004-147946 A 20040518  
OTHER SOURCE(S): MARPAT 143:485833  
GI



AB Disclosed is an adamantane derivative which is useful as a monomer for a functional resin such as a photosensitive resin that is used in the fields of photolithog. Also disclosed are a method for efficiently producing such an adamantane derivative and a photosensitive material for photoresists containing a polymer obtained from such an adamantane derivative. Specifically disclosed is an adamantane derivative which is characterized by having a structure represented by the following general formula I wherein R1 represents a hydrogen atom, a Me group or a trifluoromethyl group; Y represents an alkyl group having 1-10 carbon atoms, a halogen atom or a hydroxyl group, or alternatively two Ys may combine together to form =O, and a plurality of Ys may be the same as or different from one another; k represents an integer of 0-15; and m represents 0 or 1. Also specifically disclosed are a method for producing an adamantane derivative represented by the above general formula (I) which is characterized by reacting a halomethyl adamantyl (methyl) ether with a (meth)acrylic acid or an acid anhydride thereof, and a photosensitive material for photoresists containing a polymer obtained from such an adamantane derivative

IT 720682-48-4

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (adamantane derivative for photoresist composition)  
 RN 720682-48-4 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3</sup>,7]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)

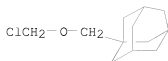


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:982948 CAPLUS  
 DOCUMENT NUMBER: 143:275623  
 TITLE: Photoresists having excellent dry etching resistance  
 and high sensitivity and manufacture of semiconductor  
 devices therewith  
 INVENTOR(S): Otoguro, Akihiko; Irie, Shigeo; Fujii, Kiyoshi;  
 Takebe, Yoko; Eda, Masataka; Yokokoji, Osamu  
 PATENT ASSIGNEE(S): Semiconductor Leading Technologies Inc., Japan; Asahi  
 Glass Co., Ltd.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005241737	A	20050908	JP 2004-48008	20040224
PRIORITY APPLN. INFO.:			JP 2004-48008	20040224

AB The photoresists comprise cyclic polymerization products of fluorodiene  
 CF<sub>2</sub>:CFCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CR<sub>1</sub>:CHR<sub>2</sub> [R<sub>1</sub>, R<sub>2</sub> = H, Cs<sub>3</sub> (fluoro)alkyl, Cs<sub>6</sub>  
 alicyclic hydrocarbyl; Q = (CH<sub>2</sub>)<sub>n</sub>C(CF<sub>3</sub>)<sub>2</sub>OR<sub>3</sub> [n = 0, 1; R<sub>3</sub> = H, etheric  
 O-containing Cs<sub>5</sub> alkyl, Cs<sub>6</sub> alkoxycarbonyl, CH<sub>2</sub>R<sub>4</sub> (R<sub>4</sub> =  
 Cs<sub>6</sub> alkoxycarbonyl)], (CH<sub>2</sub>)<sub>m</sub>CO<sub>2</sub>R<sub>5</sub> (m = 0, 1; R<sub>5</sub> = H, Cs<sub>5</sub>  
 alkyl)], radiation-sensitive acid generators, organic solvents, and  
 optionally amines. The photoresists are pasted on substrates, exposed to  
 150-250-nm light through reticles, baked, and developed to form patterns.  
 Semiconductor process involving dry etching of wafers through the  
 thus-formed resist masks is further claimed.  
 IT 720682-48-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (F2 laser-sensitive photoresists containing cyclopolymd. fluorodienes and  
 having good dry etching resistance)  
 RN 720682-48-4 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3</sup>,7]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



L10 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:962319 CAPLUS  
 DOCUMENT NUMBER: 143:257069  
 TITLE: Polymer compound, photoresist composition containing such polymer compound, and method for forming resist pattern  
 INVENTOR(S): Ogata, Toshiyuki; Matsumaru, Syogo; Kinoshita, Yohei; Hada, Hideo; Shiono, Daiju; Shimizu, Hiroaki; Kubota, Naotaka  
 PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 91 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

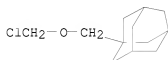
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005080473	A1	20050901	WO 2005-JP1228	20050128
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
JP 2006096965	A	20060413	JP 2004-316960	20041029
EP 1717261	A1	20061102	EP 2005-709454	20050128
R:	DE, FR			
CN 1918217	A	20070221	CN 2005-80004964	20050128
PRIORITY APPLN. INFO.:			JP 2004-45522	A 20040220
			JP 2004-134585	A 20040428
			JP 2004-179475	A 20040617
			JP 2004-252474	A 20040831
			JP 2004-316960	A 20041029
			WO 2005-JP1228	W 20050128

AB Disclosed is a polymer compound which enables to obtain a highly sensitive photoresist composition which forms a fine pattern with excellent resolution and good rectangular shape and is capable of obtaining good resist characteristics even when the acid generated by an acid generator is weak. a Also disclosed are a photoresist composition using such a polymer compound and a method for forming a resist pattern using such a photoresist composition The

photoresist composition and resist pattern-forming method use a polymer compound having an alkali-soluble group (i) which is at least one substituent selected from an alc. hydroxyl group, a carboxyl group and a phenolic hydroxyl group and protected by an acid-cleavable dissoln. inhibiting group (ii) represented by general formula  $\text{-CH}_2\text{-O-(-CH}_2\text{)}_n\text{-R1}$  wherein R1 represents an alicyclic group having 20 or less carbon atoms which may have an oxygen, nitrogen, sulfur or halogen atom; and n represents 0 or an integer of 1-5.

IT 720682-48-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (polymer compound, photoresist composition containing such polymer compound, and method for forming resist pattern)

RN 720682-48-4 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3</sup>,7]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:591346 CAPLUS  
 DOCUMENT NUMBER: 143:77880  
 TITLE: Preparation of (halomethoxyalkyl)adamantanes  
 INVENTOR(S): Ono, Hidetoshi; Hori, Kenji; Tanaka, Shinji; Hatakeyama, Naoyoshi  
 PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005179300	A	20050707	JP 2003-425065	20031222
PRIORITY APPLN. INFO.:			JP 2003-425065	20031222
OTHER SOURCE(S):			CASREACT 143:77880; MARPAT 143:77880	
GI				



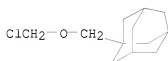
I

AB Title compds. I [Y = C1-10 (halo)alkyl, halo, heteroatom-containing group; Z = CH2X; X = halo; m = 0-15; n = 0-10] are prepared by reaction of I (Z = H) with HCHO and hydrogen halides using solvents showing water solubility (at reaction temperature) ≤5 weight%. 1-Adamantylmethanol was treated with paraformaldehyde and HCl in CH2Cl2 at 30° for 2 h to give 1-(chloromethoxymethyl)adamantane with 99% selectivity.

IT 720682-46-4P  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of (halomethoxyalkyl)adamantanes from adamantanealkanols, HCHO, and hydrogen halides)

RN 720682-46-4 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



L10 ANSWER 8 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1079728 CAPLUS

DOCUMENT NUMBER: 142:38661

TITLE: Production of adamantyl vinyl ethers useful as monomers for photosensitive resins

INVENTOR(S): Hatakeyama, Naoyoshi; Tanaka, Shinji; Ono, Hidetoshi; Kodoi, Kouichi

PATENT ASSIGNEE(S): Idemitsu Petrochemical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

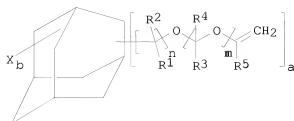
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1486480	A1	20041215	EP 2004-13231	20040604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
JP 2005023066	A	20050127	JP 2004-159276	20040528
KR 2004105614	A	20041216	KR 2004-41664	20040608
US 2005004391	A1	20050106	US 2004-862423	20040608
PRIORITY APPLN. INFO.:			JP 2003-163320	A 20030609
OTHER SOURCE(S):	MARPAT 142:38661			

GI



I

AB An adamantyl vinyl ether has the general formula (I), where each X independently represents hydrogen, halogen, C1-C10-alkyl optionally containing a heteroatom, hydroxy, C1-C8-alkoxy, carboxy, COOR with R being C1-C8-alkyl, or a keto group formed by two X's; each R1, R2, R3, R4 independently represents hydrogen, halogen, or C1-C10-alkyl optionally containing a heteroatom; each R5 independently represents hydrogen, halogen, or C1-C3-alkyl optionally containing a heteroatom; m and n are independently integers from 0 to 10; a is an integer from 1 to 4; b is an integer from 12 to 15; a+b is 16. The following structures are excluded: a structure in which only 1 to 3 vinyloxy groups are bonded to a bridge head position of the adamantyl group, a structure in which only one vinyloxymethyl group, vinyloxyethyl group or vinyloxypropyl group is bonded to a bridge head position of the adamantyl group, and a structure in which only a vinyloxy group and a hydroxy group are bonded to a bridge head position of the adamantyl group. The adamantyl vinyl ethers are useful as monomers for production of functional resins, such as photosensitive resins for photolithog., fireproofing additives, medical and agricultural intermediates. Thus, 1-[(2-chloroethoxy)methoxy]adamantane was produced in 83.3% yield by refluxing 2-chloroethyl chloromethyl ether (1.55 g, 12 mmol) and 1-adamantanol (1.52 g, 10 mmol) in THF in the presence of triethylamine (1.52 g, 15 mmol) for 8 h. An adamantyl vinyl ether, 1-[(vinyloxy)methoxy]adamantane, was produced in 85.9% yield by refluxing 1-[(2-chloroethoxy)methoxy]adamantane (2.45 g, 10 mmol) and potassium tert-butoxide (1.68 g, 15 mmol) in THF for 2 h.

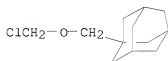
IT 720682-48-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(production of adamantyl vinyl ethers useful as monomers for photosensitive resins)

RN 720682-48-4 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

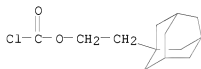
ACCESSION NUMBER: 2004:973343 CAPLUS

DOCUMENT NUMBER: 142:113591  
 TITLE: Second Generation Fluorous DEAD Reagents Have Expanded Scope in the Mitsunobu Reaction and Retain Convenient Separation Features  
 AUTHOR(S): Dandapani, Sivaraman; Curran, Dennis P.  
 CORPORATE SOURCE: Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA  
 SOURCE: Journal of Organic Chemistry (2004), 69(25), 8751-8757  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 142:113591

AB A first generation fluorous analog of di-Et azodicarboxylate (DEAD) [F3C(CF2)5CH2CH2O2CN:CO2CH2CH2(CF2)5CF3, F-DEAD-1] gives lower yields of products than diisopropyl azodicarboxylate (DIAD) in Mitsunobu reactions involving hindered alcs. or less acidic pronucleophiles such as phenols. A variety of fluoroalkyl hydrazinedicarboxylates are prepared and their retention times on fluorous resin-based HPLC are determined; two of the tested hydrazinedicarboxylates are converted to the corresponding azodicarboxylate reagents, F-DEAD-2 [C8F17(CH2)3O2CN:CO2CMe3] and F-DEAD-3 [C6F13(CH2)3O2CN:CO2(CH2)3C6F13]. Mitsunobu reactions using either F-DEAD-2 and F-DEAD-3 and the fluorinated triphenylphosphine 4-Ph2PC6H4CH2CH2(CF2)7CF3 (F-TPP) are effective for a variety of alcs. and nucleophiles such as phenols, sulfonamides, and carboxylic acids; the yields of the corresponding Mitsunobu reactions using DIAD and triphenylphosphine give products in comparable or higher yields. Fluorous coproducts formed in reactions with F-DEAD-2 and F-TPP can be separated easily by fluorous chromatog., while Mitsunobu reactions using F-DEAD-3 and F-TPP as reagents can be separated by fluorous solid phase extraction

IT 766546-16-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and fluorous HPLC retention times of fluoroalkyl hydrazinedicarboxylates and their use in the preparation of second-generation fluorous azodicarboxylates for Mitsunobu reactions)

RN 766546-16-1 CAPLUS  
 CN Carbonochloridic acid, 2-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:725497 CAPLUS  
 DOCUMENT NUMBER: 141:395095  
 TITLE: Solvent-Equilibrated Ion Pairs from Carbene Fragmentation Reactions  
 AUTHOR(S): Moss, Robert A.; Zheng, Fengmei; Fede, Jean-Marie; Johnson, Lauren A.; Sauters, Ronald R.

CORPORATE SOURCE: Department of Chemistry and Chemical Biology, Rutgers  
The State University of New Jersey, New Brunswick, NJ,  
08903, USA

SOURCE: Journal of the American Chemical Society (2004),  
126(39), 12421-12431  
CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

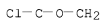
OTHER SOURCE(S): CASREACT 141:395095

AB [R+ OC Cl-] ion pairs were generated in methanol/dichloroethane solns.,  
with R+ as the 1-bicyclo[2.2.2]octyl, 1-adamantyl, or 3-homoadamantyl  
cation. Ion pairs were produced either by the direct fragmentation of  
alkoxychlorocarbenes (ROCCl), with R = 1-bicyclo[2.2.2]octyl, 1-adamantyl,  
or 3-homoadamantyl, or by the ring expansion-fragmentation of R'CH2OCCl,  
with R' = 1-norbornyl, 3-noradamantyl, or 1-adamantyl. Correlations of  
the [ROMe]/[RCl] product ratios as a function of the mole fraction of MeOH  
in dichloroethane showed that the homoadamantyl chloride ion pairs,  
produced by either the direct or ring expansion-fragmentations, were  
identical, solvent- and anion-equilibrated, and precursor independent.  
Laser flash photolysis expts. gave 20-30 ps as the time required for  
solvent equilibration and precursor independence. Methanol/chloride  
selectivities of the (less-stable) 1-adamantyl chloride and  
1-bicyclo[2.2.2]octyl chloride ion pairs were not independent of their  
ROCCl or R'CH2OCCl precursors. Computational studies provided transition  
states for the fragmentations and for the structures of the ion pairs.

IT 182802-27-3 433713-18-9  
RL: CPS (Chemical process); FMU (Formation, unclassified); PEP (Physical,  
engineering or chemical process); PRP (Properties); RCT (Reactant); FORM  
(Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent)  
(solvent-equilibrated ion pairs from carbene fragmentation reactions)

RN 182802-27-3 CAPLUS

CN Methylene, chloro(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethoxy)- (9CI) (CA INDEX  
NAME)



RN 433713-18-9 CAPLUS

CN Methylene, chloro(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yloxy)- (9CI) (CA INDEX NAME)

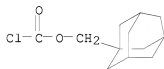


REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

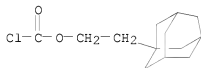
L10 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2004:641925 CAPLUS



DOCUMENT NUMBER: 141:313663  
 TITLE: Separation tagging with cyclodextrin-binding groups: Mitsunobu reactions with bis(2-(1-adamantyl)ethyl) azodicarboxylate (BadEAD) and bis(1-adamantylmethyl) azodicarboxylate (BadMAD)  
 AUTHOR(S): Dandapani, Sivaraman; Newsome, Jeffery J.; Curran, Dennis P.  
 CORPORATE SOURCE: Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA  
 SOURCE: Tetrahedron Letters (2004), 45(35), 6653-6656  
 CODEN: TELEAY; ISSN: 0040-4039  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 141:313663  
 AB A new method for separation tagging with cyclodextrin-binding groups is introduced and is exemplified in the context of the Mitsunobu reaction with adamantyl tags. HPLC expts. showed that mols. containing adamantyl groups were especially well retained on Sumichiral OA7500  $\beta$ -methylated cyclodextrin bonded silica columns relative to many other types of mols. Two new Mitsunobu reagents, bis(1-adamantylmethyl) azodicarboxylate (BadMAD) and bis(2-(1-adamantyl)ethyl) azodicarboxylate (BadEAD), were prepared, used in typical Mitsunobu reactions and separated with both  $\beta$ -methylated cyclodextrin bonded silica and standard silica.  
 IT 21317-84-0P 766546-16-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (Mitsunobu reactions with bis(2-(1-adamantyl)ethyl) azodicarboxylate and bis(1-adamantylmethyl) azodicarboxylate and separation tagging with cyclodextrin-binding groups)  
 RN 21317-84-0 CAPLUS  
 CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethyl ester (CA INDEX NAME)



RN 766546-16-1 CAPLUS  
 CN Carbonochloridic acid, 2-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:635351 CAPLUS

DOCUMENT NUMBER: 141:424972

TITLE: A new monocyclic fluoropolymer for 157-nm photoresists

AUTHOR(S): Sasaki, Takashi; Takebe, Yoko; Eda, Masataka;

Yokokoji, Osamu; Irie, Shigeo; Ootoguro, Akihiko;

Fujii, Kiyoshi; Itani, Toshiro

CORPORATE SOURCE: Research Center, Asahi Glass Co., Ltd., Yokohama,

221-8755, Japan

SOURCE: Journal of Photopolymer Science and Technology (2004),

17(4), 639-644

CODEN: JSTEED; ISSN: 0914-9244

PUBLISHER: Technical Association of Photopolymers, Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We earlier developed a series of fluoropolymers (FPRs) for use as first-generation 157-nm photoresist polymers. These FPRs have a partially fluorinated monocyclic structure and provide excellent transparency. However, their etching resistance is low (half that of conventional KrF resists) and an insufficient dissoln. rate in tetramethylammonium hydroxide (TMAH) solution. To improve the characteristics of these polymers, while retaining high transparency, we had to redesign the main chain fluoropolymer structure. In this paper, we describe a new monocyclic fluoropolymer structure for a second-generation 157-nm photoresist polymer. This structure also has a fluorine atom in the polymer main chain, as well as a fluoro-containing acidic alc. group. We synthesized two types of fluoropolymers, ASF-1 and ASF-2. We found that ASF-1 had transparency of 0.18  $\mu\text{m}^{-1}$ , better than that of the FPRs, and the etching resistance was improved. Unfortunately, the dissoln. rate was poor. On the other hand, ASF-2 showed even better transparency of 0.1  $\mu\text{m}^{-1}$ , improved etching resistance, and a dissoln. rate of more than 600 nm/s, which is sufficient for use as a resist. The introduction of a protecting group (e.g., the methoxymethyl or adamantylmethoxymethyl group) to the hydroxyl group of ASF-2 can be done after the polymerization reaction. Using partially protected ASF-2 with an appropriate protecting group, we were able to fabricate a sub-60-nm line-and-space pattern.

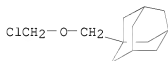
IT 720682-48-4DP, reaction products with fluoropolymer, sodium salt

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic

preparation); PREP (Preparation); USES (Uses)

(preparation and properties of monocyclic fluoropolymers for 157-nm photoresists)

RN 720682-48-4 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

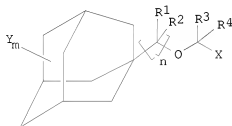
L10 ANSWER 13 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:565183 CAPLUS

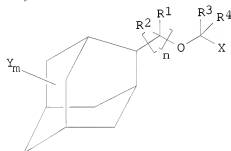
DOCUMENT NUMBER: 141:107948

TITLE: Adamantane derivatives and process for producing them  
 INVENTOR(S): Tanaka, Shinji; Ono, Hidetoshi; Kodoi, Kouichi;  
 Hatakeyama, Naoyoshi  
 PATENT ASSIGNEE(S): Idemitsu Petrochemical Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004058675	A1	20040715	WO 2003-JP16258	20031218
W: KR, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
JP 2004217627	A	20040805	JP 2003-414445	20031212
EP 1577285	A1	20050921	EP 2003-780891	20031218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
US 2006149073	A1	20060706	US 2005-540547	20051213
PRIORITY APPLN. INFO.:			JP 2002-374659	A 20021225
			WO 2003-JP16258	W 20031218
OTHER SOURCE(S):		MARPAT 141:107948		
GI				



I



II

AB Compds. I and II (R1-R4 = H, halo, C1-10 alkyl, C1-10 haloalkyl; X = halo; Y = C1-10 alkyl, C1-10 haloalkyl, halo, heteroatom-containing group; m = 0-15; n = 0-10; wherein in I, the case where both of m and n are 0 and both of R3 and R4 are H is excluded; in I and II, two Y groups may form :O group),

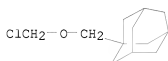
such as chloromethyl adamantylmethyl ether and chloromethyl 4-oxo-2-adamantyl ether, are prepared. The adamantane derivs. are useful as modifiers for photoresist resins in the field of photolithog., dry-etching resistance improvers, intermediates for agricultural chems. and medicines, and other various industrial products.

IT 720682-48-4P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of adamantane derivs.)

RN 720682-48-4 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



L10 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:491214 CAPLUS

DOCUMENT NUMBER: 142:472501

TITLE: A new monocyclic fluoropolymer structure for 157-nm photoresists

AUTHOR(S): Takebe, Yoko; Eda, Masataka; Okada, Shinji; Yokokoji, Osamu; Irie, Shigeo; Otaguro, Akihiko; Fujii, Kiyoshi; Itani, Toshiro

CORPORATE SOURCE: Research Center, Asahi Glass Co., Ltd., Kanagawa-ken, 221-8755, Japan

SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2004), 5376(Pt. 1, Advances in Resist Technology and Processing XXI), 151-158  
CODEN: PSISDG; ISSN: 0277-786X

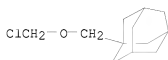
PUBLISHER: SPIE-The International Society for Optical Engineering

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We earlier developed a series of fluoropolymers (FPRs) for use as first-generation 157-nm photoresist polymers. These FPRs have a partially fluorinated monocyclic structure and provide excellent transparency. However, their etching resistance is low (half that of conventional KrF resists) and an insufficient dissoln. rate in tetramethylammonium hydroxide (TMAH) solution. To improve the characteristics of these polymers, while retaining high transparency, we had to redesign the main chain fluoropolymer structure. In this paper, we describe a new monocyclic fluoropolymer structure for a second-generation 157-nm photoresist polymer. This structure also has a fluorine atom in the polymer main chain, as well as a fluoro-containing acidic alc. group. We synthesized two types of fluoropolymers, ASF-1 and ASF-2. We found that ASF-1 had transparency of 0.18  $\mu\text{m}^{-1}$ , better than that of the FPRs, and the etching resistance was improved. Unfortunately, the dissoln. rate was poor. On the other hand, ASF-2 showed even better transparency of 0.1  $\mu\text{m}^{-1}$ , improved etching resistance, and a dissoln. rate of more than 600 nm/s, which is sufficient for use as a resist. The introduction of a protecting group (e.g., the methoxymethyl or adamantylmethoxymethyl group) to the hydroxyl group of ASF-2 can be done after the polymerization reaction. Using partially protected ASF-2 with an appropriate protecting group, we were able to fabricate a sub-60-nm line-and-space pattern.

IT 720682-48-4DP, reaction products  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (monocyclic fluoropolymer for 157-nm photoresists)  
 RN 720682-48-4 CAPLUS  
 CN Tricyclo[3.3.1.1.3,7]decane, 1-[(chloromethoxy)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:389970 CAPLUS  
 DOCUMENT NUMBER: 140:383121  
 TITLE: F2 excimer laser-sensitive positive photoresist compositions with good coatability and dry etchability  
 INVENTOR(S): Kanna, Shinichi; Mizutani, Kazuyoshi; Sasaki, Tomoya  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 65 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004138887	A	20040513	JP 2002-304421	20021018
PRIORITY APPLN. INFO.:			JP 2002-304421	20021018

AB The photoresist compns. sensitive to vacuum UV (≤160 nm) contain resins comprising 1st repeating units CF<sub>2</sub>C(XZ)F (X = O, S; Z = organic group with no acid decomposability) and 2nd repeating units having groups that are converted to alkali-soluble groups by acid decomposition so as to increase solubility of the resins in alkali developers. The resins may further contain cycloolefin units.

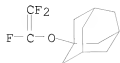
IT 685523-13-1 685523-15-3  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (F2 excimer laser-sensitive pos. photoresists with good coatability and dry etchability)

RN 685523-13-1 CAPLUS

CN Carbonic acid, 1-(bicyclo[2.2.1]hept-5-en-2-ylmethyl)-2,2,2-trifluoro-1-(trifluoromethyl)ethyl 1,1-dimethylethyl ester, polymer with 1-[(trifluoroethenyl)oxy]tricyclo[3.3.1.1.3,7]decane (9CI) (CA INDEX NAME)

CM 1

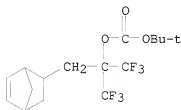
CRN 685522-91-2  
 CME C12 H15 F3 O



CM 2

CRN 196314-63-3

CMF C16 H20 F6 O3



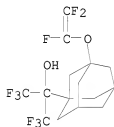
RN 685523-15-3 CAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 2-methyl-2-propenenitrile and 3-[(trifluoroethenyl)oxy]- $\alpha,\alpha$ -bis(trifluoromethyl)tricyclo[3.3.1.1.3,7]decane-1-methanol (9CI) (CA INDEX NAME)

CM 1

CRN 685522-94-5

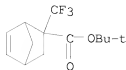
CMF C15 H15 F9 O2



CM 2

CRN 365568-55-4

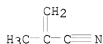
CMF C13 H17 F3 O2



CM 3

CRN 126-98-7

CMF C4 H5 N



L10 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:287622 CAPLUS

DOCUMENT NUMBER: 137:5856

TITLE: Bridgehead Carbocations via Carbene Fragmentation:

Erasing a 1010 Kinetic Preference

AUTHOR(S): Moss, Robert A.; Zheng, Fengmei; Fede, Jean-Marie; Ma, Yan; Sauters, Ronald R.; Toscano, John P.; Showalter, Brett M.

CORPORATE SOURCE: Department of Chemistry and Chemical Biology, Rutgers, The State University of New Jersey, New Brunswick, NJ, 08903, USA

SOURCE: Journal of the American Chemical Society (2002), 124(19), 5258-5259

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:5856

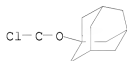
AB 1-Norbornyloxylchlorocarbene (1-NorOCCl), 1-bicyclo[2.2.2]octyloxylchlorocarbene (1-BcoOCCl), and 1-adamantyloxylchlorocarbene (1-AdOCCl) were generated in dichloroethane (DCE) by photolysis of the appropriate diazirines. The exclusive product in each case was the bridgehead alkyl chloride formed by fragmentation of the carbene to [R+ OC Cl-] ion pairs, loss of CO, and cation-anion collapse. In mixts. of methanol and DCE, each carbene gave three products: RCl, ROH, and ROME. RCl and ROME resulted from competition between ion pair collapse and methanol capture of the cation. ROH resulted from methanol capture of the carbene (before fragmentation), followed by eventual methanolysis and hydrolysis of ROCH(Cl)OMe. The ratios of carbene capture to carbene fragmentation fell in the order 1-NorOCCl > BcoOCCl > 1-AdOCCl; 1-Nor+ was the least stable cation and the slowest to form by fragmentation, so that this carbene was the most readily captured. This trend was accentuated in methanol-pentane mixts., where ionic fragmentation was further slowed in the less polar solvent. Laser flash photolysis with either UV or time-resolved IR (TRIR) monitoring permitted the determination of the absolute rate consts. for fragmentations

of the carbenes in DCE at 25°. The rate consts. (s-1) were: 1-NorOCCl (3.3 + 104), 1-BcoOCCl (1.5 + 105), and 1-AdOCCl (5.9 + 105). The rate consts. decreased in the order of increasing strain in the resulting bridgehead carbocation, but the range of rate consts. was compressed to a factor of only .apprx.18. This contrasts with the factor of 1010 by which the acetolysis of 1-AdOTs at 70° exceeded that of 1-NorOTs. The fragmentation of 1-NorOCCl to the ion pair was 3 + 1015 times faster than the acetolysis of 1-NorOTs. The activation energies were measured as 9.0 kcal/mol (log A = 11.2 s-1) for the fragmentation of 1-NorOCCl and 4.4 kcal/mol (log A = 8.44 s-1) for that of 1-BcoOCCl both in DCE. B3LYP/6-31G\* computed activation energies in simulated DCE were 14.6 and 2.7 kcal/mol, resp.

IT 433713-18-9

RL: CPS (Chemical process); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent) (carbene mechanistic reaction intermediate; erasing 1010 kinetic preference and bridgehead carbocations via carbene fragmentation)

RN 433713-18-9 CAPLUS

CN Methylene, chloro(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yloxy)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:758593 CAPLUS

DOCUMENT NUMBER: 134:85927

TITLE: New Kinetics Methodologies Applied to Carbene Fragmentation Reactions

AUTHOR(S): Moss, Robert A.; Johnson, Lauren A.; Yan, Shunqi; Toscano, John P.; Showalter, Brett M.

CORPORATE SOURCE: Department of Chemistry, Rutgers The State University of New Jersey, New Brunswick, NJ, 08903, USA

SOURCE: Journal of the American Chemical Society (2000), 122(45), 11256-11257

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB LFP-Time Resolved IR spectroscopy (TRIR) kinetics were conducted on chloro(alkylmethoxy)carbene precursors 3-benzyloxy-3-chlorodiazirine and 3-(1-adamantylmethoxy)-3-chlorodiazirine, by monitoring the formation of CO. Activation parameters were determined B3LYP DFT calcs. support the mechanism which suggests that the (1-adamantylmethoxy)chlorocarbene fragmentation involves a concerted ring expansion of the 1-adamantylmethyl group directly to the homoadamantyl cation.

IT 182802-27-3

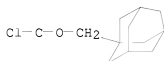
RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent)



(fragmentation kinetics of alkoxychlorocarbenes)

RN 182802-27-3 CAPLUS

CN Methylene, chloro(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethoxy)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:405836 CAPLUS

DOCUMENT NUMBER: 131:213812

TITLE: A novel synthesis of trifluoromethyl ethers via xanthates, utilizing BrF<sub>3</sub>

AUTHOR(S): Ben-David, Iris; Rechavi, Dalit; Mishani, Eyal; Rozen, Shlomo

CORPORATE SOURCE: Raymond and Beverly Sackler Faculty of Exact Sciences, School of Chemistry, Tel-Aviv University, Tel-Aviv, 69978, Israel

SOURCE: Journal of Fluorine Chemistry (1999), 97(1-2), 75-78  
CODEN: JFLCAR; ISSN: 0022-1139

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal

LANGUAGE: English

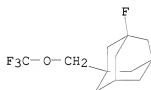
AB Alcs. were transformed into trifluoromethyl ethers by converting them to xanthates in almost quant. yield and following with a BrF<sub>3</sub> reaction.

IT 242795-34-2P 242795-40-0P 242795-41-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of trifluoromethyl ethers by reaction of xanthates with bromine trifluoride)

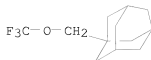
RN 242795-34-2 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-fluoro-3-[(trifluoromethoxy)methyl]- (CA INDEX NAME)

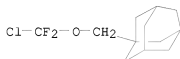


RN 242795-40-0 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(trifluoromethoxy)methyl]- (CA INDEX NAME)



RN 242795-41-1 CAPLUS  
 CN Tricyclo[3.3.1.1.3,7]decane, 1-[(chlorodifluoromethoxy)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1998:323158 CAPLUS  
 DOCUMENT NUMBER: 129:16386  
 TITLE: Preparation of branched peptide linkers  
 INVENTOR(S): King, Dalton; Firestone, Raymond A.; Dubowchik, Gene M.  
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA  
 SOURCE: PCT Int. Appl., 120 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9819705	A1	19980514	WO 1997-US19851	19971031
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2264610	A1	19980514	CA 1997-2264610	19971031
AU 9851597	A	19980529	AU 1998-51597	19971031
EP 941120	A1	19990915	EP 1997-946428	19971031
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001505194	T	20010417	JP 1998-521606	19971031
US 6759509	B1	20040706	US 1997-962348	19971031
PRIORITY APPLN. INFO.:			US 1996-30367P	P 19961105
			WO 1997-US19851	W 19971031
OTHER SOURCE(S):		MARPAT 129:16386		
AB		Conjugates containing a targeting ligand, such as an antibody, a		

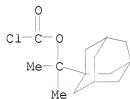
therapeutically active drug and a branched peptide linker are given. The branched peptide linker contains two or more amino acid moieties that provide an enzyme cleavage site. The number of drugs capable of being bonded to the branched linkers varies by a factor of two for each generation of branching. Compds. A-Wc-(CH<sub>2</sub>)<sub>a</sub>-(Q)p-(CO)d-E[(CH<sub>2</sub>)<sub>b</sub>-X]<sub>2</sub> (A = thiol acceptor, W = bridging moiety, c = integer 0-1, a = 2-12, Q = O, NH, alkylimino, p, d = 0-1, E = polyvalent atom, b = 1-10, X = CO-Y-Zm-Gn, where Y = two L-amino acid residues, m = 0-1, G = self-immolative spacer, n = 0-1), and related compds. with further branching at X, are claimed. Thus, syntheses of Met-IDP-[AA-Lys-PABC-DOX]<sub>2</sub> dichloroacetates [Met-IDP = N-maleoyl-N',N'-bis(carboxyethyl)ethylenediamine residue; AA = Lys, Phe, or Ala; PABC = p-NHC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>O<sub>2</sub>C; DOX = doxorubicin residue] are described.

IT 207613-88-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of branched peptide linkers)

RN 207613-88-5 CAPLUS

CN Carbonochloridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester  
(CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:578907 CAPLUS

DOCUMENT NUMBER: 126:8576

TITLE: Amino acids and peptides. Part 45. Development of a new  $\pi\pi$ -protecting group of histidine,  $N\pi$ -(1-adamantyloxymethyl)histidine, and its evaluation for peptide synthesis

AUTHOR(S): Okada, Yoshio; Wang, Jidong; Yamamoto, Takeshi; Mu, Yu; Yokoi, Toshio

CORPORATE SOURCE: Fac. Pharmaceutical Sci., Kobe Gakuin Univ., Kobe, 651-21, Japan

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1996), (17), 2139-2143

CODEN: JCPRB4; ISSN: 0300-922X

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

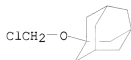
LANGUAGE: English

OTHER SOURCE(S): CASREACT 126:8576

AB  $N\pi$ -(1-Adamantyloxymethyl)histidine, His( $N\pi$ -1-Adom), is prepared and its properties are examined. The 1-Adom group can be easily removed by trifluoroacetic acid and it is stable to 20% piperidine-DMF and 1 mol dm<sup>-3</sup> NaOH. His( $N\pi$ -1-Adom) derivs. can suppress racemization during coupling reactions. His( $N\pi$ -1-Adom) can be used in solid-phase peptide synthesis in combination with fluoren-9-ylmethoxycarbonyl (Fmoc) as an

Na-protecting group. TSH-releasing hormone is successfully synthesized by using His(N $\pi$ -1-Adom).

IT 177093-80-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (development and use of the adamantyloxymethyl protective group for solid-phase preparation of histidine-containing peptides)  
 RN 177093-80-0 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-(chloromethoxy)- (CA INDEX NAME)



L10 ANSWER 21 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:569675 CAPLUS

DOCUMENT NUMBER: 125:300266

TITLE: Absolute Kinetics of Alkoxychlorocarbene Fragmentation

Moss, Robert A.; Ge, Chuan-Sheng; Maksimovic, Ljiljana

CORPORATE SOURCE: Department of Chemistry, Rutgers The State University

of New Jersey, New Brunswick, NJ, 08903, USA

SOURCE: Journal of the American Chemical Society (1996),

118(40), 9792-9793

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

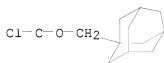
LANGUAGE: English

AB Alkoxychlorocarbenes, ROCCl, generated by the photolysis of 3-alkoxy-3-halodiazirines in MeCN, fragmented to ion pairs [R<sup>+</sup> OC Cl<sup>-</sup>] from which products were derived. Competitively, the carbenes were intercepted by HCl or traces of water. The absolute rate consts. derived for carbene fragmentation in MeCN-pyridine (where HCl was scavenged), were determined by laser flash photolysis: R = benzyl, k = 0.69-1.3 + 10<sup>6</sup> s<sup>-1</sup>; R = (1-adamantyl)methyl, k = 2.8-5.2 + 10<sup>6</sup> s<sup>-1</sup>; and R = neopentyl, k = 0.3-1.3 + 10<sup>6</sup> s<sup>-1</sup>. (The ranges shown for k represent detns. by direct or double reciprocal kinetic analyses.). Principal products (in MeCN), as a function of R, included R = benzyl; benzyl chloride (63%) and N-benzyl acetamide (37%, Ritter reaction); R = (1-adamantyl)methyl; 1-homoadamantyl chloride (61.8%), (1-adamantyl)methyl chloride (2.7%), N-1-homoadamantyl acetamide (11.3%), 1-homoadamantanol (5.5%), (1-adamantyl)methyl dichloromethyl ether (16.3%), and (1-adamantyl)methyl formate (2.4%); R = neopentyl: 2-methyl-2-butene (13.8%), 2-methyl-1-butene (26.5%), 2-chloro-2-methylbutane (4.0%), neopentyl dichloromethyl ether (51.6%), and neopentyl formate (3.4%). The mechanistic origins of the products are discussed. In particular, distinction is made between the ion pair (carbene fragmentation) products and the HCl (dichloromethyl ethers) and water (formates) carbene interception products. A strong solvent effect was noted; in hexane, the carbenes were slow to fragment and carbene dimerization became the chief reaction pathway.

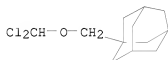
IT 182802-27-3

RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); FORM (Formation,

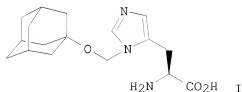
nonpreparative); PROC (Process); RACT (Reactant or reagent)  
 (absolute kinetics of alkoxychlorocarbene fragmentation)  
 RN 182802-27-3 CAPLUS  
 CN Methylene, chloro(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethoxy)- (9CI) (CA INDEX  
 NAME)



IT 182802-46-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (absolute kinetics of alkoxychlorocarbene fragmentation)  
 RN 182802-46-6 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[(dichloromethoxy)methyl]- (CA INDEX NAME)



L10 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:243788 CAPLUS  
 DOCUMENT NUMBER: 125:11440  
 TITLE: Development of a new N $\pi$ -protecting group for  
 histidine, N $\pi$ -1-adamantyloxymethylhistidine  
 AUTHOR(S): Okada, Yoshio; Wang, Jidong; Yamamoto, Takeshi; Mu, Yu  
 CORPORATE SOURCE: Fac. Pharmaceutical Sci., Kobe Gakuin Univ., Kobe,  
 651-21, Japan  
 SOURCE: Chemical & Pharmaceutical Bulletin (1996), 44(4),  
 871-3  
 CODEN: CPBTAL; ISSN: 0009-2363  
 PUBLISHER: Pharmaceutical Society of Japan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 125:11440  
 GI



AB N $\pi$ -1-Adamantyloxymethylhistidine (I) was prepared, and the properties of

the 1-adamantyloxymethyl (1-Adom) group were examined 1-Adom group can be easily removed by TFA; it is stable to 20% piperidine/DMF and 1N NaOH. Derivs. of I can suppress racemization during coupling reaction. TRH was successfully synthesized using I.

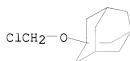
IT 177093-80-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, peptide coupling, and deprotection reactions of (adamantyloxymethyl)histidine derivs.)

RN 177093-80-0 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-(chloromethoxy)- (CA INDEX NAME)



L10 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:496128 CAPLUS

DOCUMENT NUMBER: 119:96128

TITLE: Investigations with selective deblocking reagents for Adpoc-protected amino acids and peptides

AUTHOR(S): Voelter, Wolfgang; Kalbacher, Hubert

CORPORATE SOURCE: Physiol. chem. Inst., Univ. Tuebingen, Tuebingen, W-7400, Germany

SOURCE: Liebigs Annalen der Chemie (1993), (2), 131-6

CODEN: LACHDL; ISSN: 0170-2041

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 119:96128

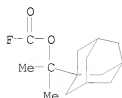
AB Selective reagents for the removal of the Adpoc (adamantylisopropoxycarbonyl) group have been developed. For this purpose several peptides containing tryptophan and N<sup>ε</sup>-tert-butoxycarbonyllysine have been synthesized. Among several acidolytic reagents, 0.1 N HCl/CF<sub>3</sub>CH<sub>2</sub>OH/CHCl<sub>3</sub> (1:9:1) and 50% HCOOH/CF<sub>3</sub>CH<sub>2</sub>OH/CHCl<sub>3</sub> (1:9:1) show high selectivity especially for the N<sup>ε</sup>-tert-butoxycarbonyl group of lysine. Cleavage rates are determined by HPLC and TLC.

IT 74654-74-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with amino acids)

RN 74654-74-3 CAPLUS

CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)



L10 ANSWER 24 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:489873 CAPLUS

DOCUMENT NUMBER: 117:89873

TITLE: Aerosol fluorination of 1-chloroadamantane, 2-chloroadamantane, and methyl 1-adamantylacetate: a novel synthetic approach to 1- and 2-substituted hydryl-, methyl-, and (difluoromethyl-F-adamantanes

AUTHOR(S): Adcock, James L.; Luo, Huimin; Zuberi, Sharique S.

CORPORATE SOURCE: Dep. Chem., Univ. Tennessee, Knoxville, TN, 37996-1600, USA

SOURCE: Journal of Organic Chemistry (1992), 57(17), 4749-52

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 117:89873

AB 1-Chloroperfluoroadamantane (I) and 2-chloroperfluoroadamantane (II) have been synthesized by aerosol direct fluorination of the corresponding hydrocarbons for the first time. The conversion of I and II to 1- and 2-methylperfluoroadamantane using MeLi and to 1- and 2-hydrylperfluoroadamantane by two different methods is described. The aerosol direct fluorination of the Me ester of 1-adamantaneacetic acid gave the perfluorinated analog and the analogous acid fluoride, from which 1-difluoromethylperfluoroadamantane was synthesized in good yield. All compds. were characterized by <sup>19</sup>F-NMR, FTIR, mass spectrometry and elemental anal.

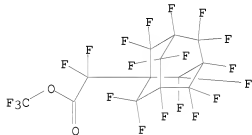
IT 82829-41-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and sequential hydrolysis and decarboxylation of)

RN 82829-41-2 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-acetic acid,  $\alpha,\alpha,2,2,3,4,4,5,6,6,7,8,8,9,9,10,10$ -heptadecafluoro-, trifluoromethyl ester (CA INDEX NAME)



L10 ANSWER 25 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:440368 CAPLUS

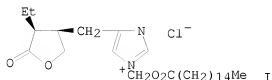
DOCUMENT NUMBER: 117:40368

TITLE: New water-soluble pilocarpine derivatives with enhanced and sustained muscarinic activity

AUTHOR(S): Druzgala, Pascal; Winwood, David; Drewniak-Deyrup, Malgorzata; Smith, Scott; Bodor, Nicholas; Kaminski, James J.

CORPORATE SOURCE: Xenon Vision, Inc., Alachua, FL, 32615, USA

SOURCE: Pharmaceutical Research (1992), 9(3), 372-7  
 CODEN: PHREEB; ISSN: 0724-8741  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

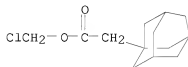


AB The synthesis of an homologous series of new water-soluble derivs. of pilocarpine is described. The new compds., referred to as soft quaternary salts, are water soluble by virtue of a cationic ammonium head and their lipophilicity can be modulated by manipulating the size and the nature of the substituent in the inactive portion of the mol. The miotic activity of the compds. was evaluated after administration to normotensive New Zealand White rabbits. Changes in pupil size indicated a substantial cholinergic effect on the iridal sphincter musculature. The best candidate, I which has a 16-carbon side chain, was evaluated for reduction of the intraocular pressure in genetically glaucomatous beagles. I is superior to pilocarpine in both tests, with a potency 10-20-fold that of the parent compound and a longer duration of action. The new compds. are prodrug forms of pilocarpine which greatly enhance the corneal bioavailability of the parent compound

IT 142059-93-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction with pilocarpine)

RN 142059-93-6 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-acetic acid, chloromethyl ester (CA INDEX NAME)



L10 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1990:477752 CAPLUS  
 DOCUMENT NUMBER: 113:77752  
 TITLE: Radiochemical alkylation of adamantane by perfluorovinyl ethers  
 AUTHOR(S): Machula, A. A.; Podkhalyuzin, A. T.; Shapet'ko, N. N.  
 CORPORATE SOURCE: Nauchno-Issled. Fiz.-Khim. Inst. im. Karpova, Moscow, USSR  
 SOURCE: Khimiya Vysokikh Energii (1990), 24(2), 117-21  
 CODEN: KHVKAQ; ISSN: 0023-1193



DOCUMENT TYPE:

Journal

LANGUAGE:

Russian

AB Title reaction with  $\text{CF}_2\text{:CFR}$  [I; R =  $\text{OC}_3\text{F}_7\text{-n}$ ,  $\text{O}(\text{CF}_2)_3\text{OCF}_3$ ] and a  $^{60}\text{Co}$  source in EtOAc at 308-373 K gave 1- and 1,3-dialkylation products via a complex mechanism. A kinetic anal. yielded activation energies of .apprx.16-17 kJ/mol. I [R =  $\text{OCF}_3$ ,  $\text{OCF}_2\text{CF}(\text{CF}_3)\text{OC}_3\text{F}_7\text{-n}$ ] were of comparable reactivity to the above, but that of I [R =  $\text{CF}_3$ ,  $\text{O}[\text{CF}_2\text{CF}(\text{CF}_3)\text{O}]_2\text{C}_3\text{F}_7\text{-n}$ ,  $\text{OCF}_2\text{CF}(\text{CF}_3)\text{OCF}_2\text{CF}_2\text{SO}_2\text{F}$ , F,  $\text{O}(\text{CF}_2)_5\text{CO}_2\text{Me}$ ,  $\text{O}(\text{CF}_2)_3\text{OCF}(\text{CF}_3)\text{CN}$ ] decreased in the stated order of R.

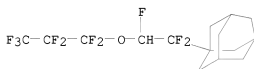
IT 128428-29-5P 128428-30-8P 128428-31-9P

128428-32-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

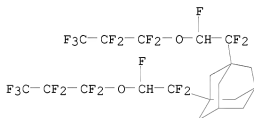
RN 128428-29-5 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[1,1,2-trifluoro-2-(heptafluoropropoxy)ethyl]- (9CI) (CA INDEX NAME)



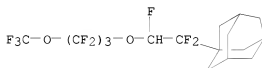
RN 128428-30-8 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1,3-bis[1,1,2-trifluoro-2-(heptafluoropropoxy)ethyl]- (9CI) (CA INDEX NAME)



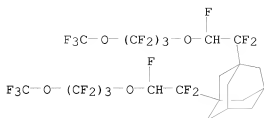
RN 128428-31-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[1,1,2-trifluoro-2-[1,1,2,2,3,3-hexafluoro-3-(trifluoromethoxy)propoxy]ethyl]- (CA INDEX NAME)

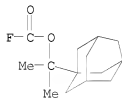


RN 128428-32-0 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1,3-bis[1,1,2-trifluoro-2-[1,1,2,2,3,3-hexafluoro-3-(trifluoromethoxy)propoxy]ethyl]- (CA INDEX NAME)

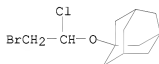


L10 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1988:167919 CAPLUS  
 DOCUMENT NUMBER: 108:167919  
 TITLE: The interaction of copper(II) ions with the thyrotropin-releasing hormone synthesized by Adpoc protection  
 AUTHOR(S): Maskos, Karol; Kalbacher, Hubert; Stock, Wieland; Voelter, Wolfgang  
 CORPORATE SOURCE: Physiol.-Chem. Inst., Univ. Tuebingen, Tuebingen, D-7400, Fed. Rep. Ger.  
 SOURCE: Zeitschrift fuer Naturforschung, B: Chemical Sciences (1987), 42(4), 459-66  
 CODEN: ZNBSEN; ISSN: 0932-0776  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The copper(II) complexes of the TSH-releasing hormone (L-pyroglutamyl-L-histidyl-L-prolinamide, TRH) in aqueous 3M LiCl solns. were investigated as a function of pH by CD, absorption, ESR spectroscopy. A simple ML (1N) complex of copper (II)-TRH is formed over the pH range 4.0-4.5, while 2N and 3N complexes are present in solns. of pH of 4.4-6.0. From pH 6.1 to 9.8, a ML2 (4N) complex is formed and this species is the only complex found over the pH range 6.5-8.5. At pH values above 9.0, a 3N species is formed in addition to a 2N complex which is present in the solns. of pH 11.3. These observations are controversial with respect to former reports. TRH was synthesized using the fully Adpoc (adamantylisopropylloxycarbonyl)-protected histidine. The advantages of the Adpoc group (cleavable under extreme mild acidolytic conditions) become obvious.  
 IT 74654-74-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (protection by, of histidine)  
 RN 74654-74-3 CAPLUS  
 CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1.3,7]dec-1-ylethyl ester (CA INDEX NAME)

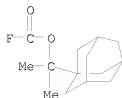


L10 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:111768 CAPLUS  
 DOCUMENT NUMBER: 108:111768  
 TITLE: Efficient synthesis of tert-alkoxyethynes  
 AUTHOR(S): Pericas, Miquel A.; Serratosa, Felix; Valenti, Eduard  
 CORPORATE SOURCE: Dep. Quim. Org., Univ. Barcelona, Barcelona, 08028, Spain  
 SOURCE: Tetrahedron (1987), 43(10), 2311-16  
 CODEN: TETRAB; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 108:111768  
 AB Bromoalkoxylation of EtOCH:CH<sub>2</sub> with Br and ROH (R = Me<sub>3</sub>C, 1-adamantyl) gave BrCH<sub>2</sub>CH(OR)OEt (I). Chloroethoxylation of I with PCl<sub>5</sub>, followed by dehydrochlorination, gave (Z)-ROCH:CHBr (II) in 72-76% yields. Dehydrobromination of II with NaNH<sub>2</sub> gave ROC.tplbond.CH in 59-75% yields. Dehydrobromination of II (R = Me<sub>3</sub>C) with LiN(CHMe<sub>2</sub>)<sub>2</sub>, followed by alkylation with BuBr, gave Me<sub>3</sub>COC.tplbond.CBu in 47-55% yield.  
 IT 113279-38-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and dehydrochlorination of, with triethylamine)  
 RN 113279-38-2 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-(2-bromo-1-chloroethoxy)- (CA INDEX NAME)

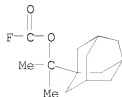


L10 ANSWER 29 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1984:611692 CAPLUS  
 DOCUMENT NUMBER: 101:211692  
 ORIGINAL REFERENCE NO.: 101:32099a  
 TITLE: Recently developed amino protecting groups  
 AUTHOR(S): Voelter, Wolfgang; Kalbacher, Hubert; Beni, Charles; Heinzl, Wolfgang; Mueller, Juergen  
 CORPORATE SOURCE: Physiol. Inst., Univ. Tuebingen, Tuebingen, D-7400, Fed. Rep. Ger.  
 SOURCE: Chem. Pept. Proteins, Proc. USSR-FRG Symp., 4th (1984), Meeting Date 1982, 103-14. Editor(s): Voelter, Wolfgang. de Gruyter: Berlin, Fed. Rep. Ger.  
 CODEN: 52BGAY  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 AB Cleavage rates are tabulated for amino acids and peptides protected by 3,5-(Me<sub>3</sub>C)<sub>2</sub>OC<sub>6</sub>H<sub>3</sub>CR<sub>2</sub>O<sub>2</sub>C (R = H, Me) or RCM<sub>2</sub>O<sub>2</sub>C (R = PhCH<sub>2</sub>, 1-adamantyl).  
 IT 74654-74-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, for protection of amino acids)  
 RN 74654-74-3 CAPLUS  
 CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)

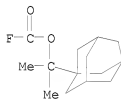


L10 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1984:552339 CAPLUS  
 DOCUMENT NUMBER: 101:152339  
 ORIGINAL REFERENCE NO.: 101:23083a,23086a  
 TITLE: Substituted carbonic acid esters  
 INVENTOR(S): Kalbacher, Hubert; Voelter, Wolfgang  
 PATENT ASSIGNEE(S): Fed. Rep. Ger.  
 SOURCE: U.S., 9 pp. Cont. of U.S. Ser. No. 71,668, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

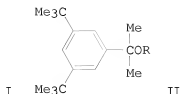
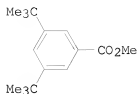
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4440692	A	19840403	US 1982-372798	19820428
PRIORITY APPLN. INFO.:			US 1979-71668	A1 19790831
OTHER SOURCE(S):		CASREACT 101:152339; MARPAT 101:152339		
AB RCR1R202CR3 [R = 1-adamantyl (Ad) or substituted Ad; R1, R2 = C1-8 alkyl; R3 = Cl, F, azido, (un)substituted OPh, succinimido, ON:CRCN, O2CCMe2R]				
were prepared as reagents for the synthesis of protected amino acids and peptides, e.g., AdCMe2O2C (Adpoc) amino acids. Thus, SO3-free FCOC1, obtained from 65% oleum and Cl3CF, was treated with AdCMe2OH in ether containing Et3N at -40° until gas evolution ceased. The resulting mixture was allowed to stand overnight at -20° to give 95% Adpoc-F. Adpoc-F was treated with amino acids to give Adpoc amino acids, e.g., Adpoc-Trp-OH was obtained in 82% yield.				
IT 74654-74-3P				
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
(preparation and reaction of, with amino acid)				
RN 74654-74-3 CAPLUS				
CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl ester (CA INDEX NAME)				



L10 ANSWER 31 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1983:179873 CAPLUS  
 DOCUMENT NUMBER: 98:179873  
 ORIGINAL REFERENCE NO.: 98:27363a,27366a  
 TITLE: Conventional synthesis of thymopoietin 32-36 (TP 5) using the acid-labile 1-(1-adamantyl)-1-methylethoxycarbonyl group  
 AUTHOR(S): Heinzel, Wolfgang; Kronbach, Thomas; Voelter, Wolfgang  
 CORPORATE SOURCE: Physiol. Chem. Inst., Univ. Tuebingen, Tuebingen, D-7400/1, Fed. Rep. Ger.  
 SOURCE: Zeitschrift fuer Naturforschung, Teil B: Anorganische Chemie, Organische Chemie (1982), 37B(12), 1652-8  
 CODEN: ZNBAD2; ISSN: 0340-5087  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB The title peptide, H-Arg-Lys-Asp-Val-Tyr-OH, was prepared by stepwise couplings in solution using the title group (Adpoc) for the protection of NH2 groups. The Adpoc group can be cleaved selectively by mild acidolysis (3% CF3CO2H in CH2Cl2) in the presence of Me3CO2C and tert-Bu groups.  
 IT 74654-74-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, with valine derivs.)  
 RN 74654-74-3 CAPLUS  
 CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1,3,7]dec-1-ylethyl ester (CA INDEX NAME)



L10 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1983:161159 CAPLUS  
 DOCUMENT NUMBER: 98:161159  
 ORIGINAL REFERENCE NO.: 98:24471a,24474a  
 TITLE: The 1-(3,5-di-tert-butylphenyl)-1-methylethoxycarbonyl (t-Bumeoc) residue, a novel extremely acid-labile amino protecting group for peptide syntheses  
 AUTHOR(S): Voelter, Wolfgang; Mueller, Juergen  
 CORPORATE SOURCE: Physiol.-Chem. Inst., Univ. Tuebingen, Tuebingen, D-7400, Fed. Rep. Ger.  
 SOURCE: Liebigs Annalen der Chemie (1983), (2), 248-60  
 CODEN: LACHDL; ISSN: 0170-2041  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 GI



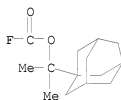
AB The t-Bumeoc group was used as a protective group for the NH<sub>2</sub> group in peptide synthesis. Benzoate I was treated with MeMgI to give alc. II (R = H), which was treated with ClCOF to give I (R = COF) (t = Bumeoc-F). Amino acids were N-acylated with t-Bumeoc-F to give t-Bumeoc amino acids, which were characterized by <sup>13</sup>C NMR. The t-Bumeoc group was cleaved under very mild acidic conditions; the kinetics of this cleavage was studied. t-Bumeoc-Phe-ONSu (NSu = succinimido) was coupled with D-leucine to give t-Bumeoc-Phe-D-Leu-OH, which was coupled with H-Arg-Phe-NH<sub>2</sub> to give t-Bumeoc-Phe-D-Leu-Arg-Phe-NH<sub>2</sub>.

IT 74654-74-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with phenylalanine)

RN 74654-74-3 CAPLUS

CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester  
(CA INDEX NAME)



L10 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:616689 CAPLUS

DOCUMENT NUMBER: 97:216689

ORIGINAL REFERENCE NO.: 97:36389a,36392a

TITLE: The 1-(1-adamantyl)-1-methylethoxycarbonyl group for

amino protection in peptide synthesis

AUTHOR(S): Voelter, Wolfgang; Kalbacher, Hubert

CORPORATE SOURCE: Inst. Org. Chem., Tuebingen Univ., Tuebingen, D-7400,  
Fed. Rep. Ger.

SOURCE: Pept., Proc. Eur. Pept. Symp., 16th (1981), Meeting  
Date 1980, 144-9. Editor(s): Brunfeldt, K. Scriptor:  
Copenhagen, Den.

CODEN: 48NWA3

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The title group (Adpoc) was incorporated into amino acids by N-acylating the amino acids with Adpoc-OPh, Adpoc-F, or Adpo-oxiimino-2-phenylacetonitrile. The resulting Adpoc amino acids are crystalline compds. and are stable over months at room temperature; they are also stable to UV

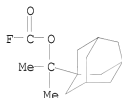
light. The Adpoc group is cleaved under mild acidolytic conditions. Adpoc amino acids were used in the solid-phase synthesis of thymopoietin-(36-36), H-Arg-Lys-Asp-Val-Tyr-OH, and in the conventional solution synthesis of thyrotropin-releasing hormone, pyroGlu-His-Pro-NH<sub>2</sub>.

IT 74654-74-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with amino acids)

RN 74654-74-3 CAPLUS

CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester  
(CA INDEX NAME)



L10 ANSWER 34 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:553115 CAPLUS

DOCUMENT NUMBER: 97:153115

ORIGINAL REFERENCE NO.: 97:25363a,25366a

TITLE: Electropreparation of alkyl-substituted  
perfluoroadamantane

PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

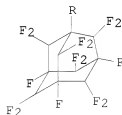
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 57079187	A	19820518	JP 1980-153995	19801031
JP 57043637	B	19820916		
PRIORITY APPLN. INFO.:			JP 1980-153995	19801031
GI				



I



II

AB Alkyl-substituted perfluoroadamantones I [R = C1-4 straight chain perfluoroalkyl] were obtained by the electrolytic fluorination of II [HOZ

=  $\alpha$ -hydroxy C1-4 straight chain alkyl] in anhydrous HF under an inert gas cover.

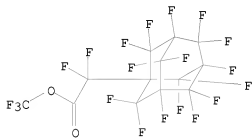
IT 82829-41-2P

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of, by electrochem. fluorination of hydroxyalkyladamantane)

RN 82829-41-2 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-acetic acid,  $\alpha,\alpha,2,2,3,4,4,5,6,6,7,8,8,9,9,10,10$ -heptafluoro-, trifluoromethyl ester (CA INDEX NAME)



L10 ANSWER 35 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:218200 CAPLUS

DOCUMENT NUMBER: 96:218200

ORIGINAL REFERENCE NO.: 96:36080h,36081a

TITLE: Carbon-13 NMR spectroscopy of new amino protective groups

AUTHOR(S): Fuchs, Wolfram; Kalbacher, Hubert; Voelter, Wolfgang  
CORPORATE SOURCE: Abt. Org. Phys. Biochem., Univ. Tuebingen, Tuebingen, 7400, Fed. Rep. Ger.

SOURCE: Organic Magnetic Resonance (1981), 17(3), 157-62  
CODEN: ORMRRD; ISSN: 0030-4921

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The <sup>13</sup>C NMR spectra 30 urethane group N-protected amino acids, e.g. N-(1-adamantyl-1-methylethoxycarbonyl)glycine, were recorded. The <sup>13</sup>C NMR parameters correlate to the speeds of acidolytic cleavage of the protective group.

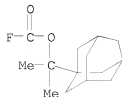
IT 74654-74-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with amino acids)

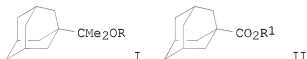
RN 74654-74-3 CAPLUS

CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)





L10 ANSWER 36 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1981:140148 CAPLUS  
 DOCUMENT NUMBER: 94:140148  
 ORIGINAL REFERENCE NO.: 94:22965a,22968a  
 TITLE: 1-(1-Adamantyl)-1-methylethoxycarbonyl (ADPOC): a new group for amino protection in peptide synthesis with advantageous properties  
 AUTHOR(S): Voelter, W.; Kalbacher, H.  
 CORPORATE SOURCE: Inst. Org. Chem., Univ. Tuebingen, Tuebingen, 7400, Fed. Rep. Ger.  
 SOURCE: Pept., Struct. Biol. Funct., Proc. Am. Pept. Symp., 6th (1979), 325-8. Editor(s): Gross, Erhard; Meienhofer, Johannes. Pierce Chem. Co.: Rockford, Ill.  
 CODEN: 44LVAU  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 GI

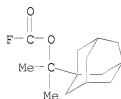


AB Adamantylisopropanol I (R = H) was treated with ClCO2Ph, FCOCl, and COCl2/HON:CPHCN to give adamantane reagents I (R = CO2Ph, COF, and CON:CPHCN), which were treated with amino acids to give ADPOC amino acids. Adamantanecarboxylate II (R1 = H) was esterified with PC15/EtOH to give II (R1 = Et), which was treated with MeMgI to give I (R = H). ADPOC amino acids and peptides are stable for months at room temperature. The ADPOC group can be removed 1,000 times faster than the Me3CO2C group under very mild acidolytic conditions.

IT 74654-74-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, with amino acids)

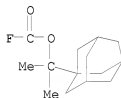
RN 74654-74-3 CAPLUS

CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)



L10 ANSWER 37 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1981:103796 CAPLUS

DOCUMENT NUMBER: 94:103796  
 ORIGINAL REFERENCE NO.: 94:16963a,16966a  
 TITLE: 1-(1-Adamantyl)-1-methylethoxycarbonyl (Adpoc) fluoride, a useful reagent for synthesis of a new class of protected amino acids with advantageous properties for peptide synthesis  
 AUTHOR(S): Kalbacher, Hubert; Voelter, Wolfgang  
 CORPORATE SOURCE: Inst. Org. Chem., Univ. Tuebingen, Tuebingen, D-7400, Fed. Rep. Ger.  
 SOURCE: Journal of the Chemical Society, Chemical Communications (1980), (24), 1265-6  
 CODEN: JCCCAT; ISSN: 0022-4936  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 94:103796  
 AB Adpoc amino acids were prepared in 69-89% yields under mild conditions by acylating the amino acid with the title reagent (I) in DMF/Et<sub>2</sub>O containing Et<sub>3</sub>N at 0° for 6 h. I was prepared in 95% yield by treatment of 2-(1-adamantyl)propan-2-ol with FCOC1 (CH<sub>2</sub>Cl<sub>2</sub>, Et<sub>3</sub>N, -40 to -30°, overnight).  
 IT 74654-74-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and acylation by, of amino acids)  
 RN 74654-74-3 CAPLUS  
 CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl ester (CA INDEX NAME)



L10 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:514050 CAPLUS  
 DOCUMENT NUMBER: 93:114050  
 ORIGINAL REFERENCE NO.: 93:18244h,18245a  
 TITLE: Adamantanepropyl esters as protective groups  
 INVENTOR(S): Karlbaha, H.; Bowter, B.  
 PATENT ASSIGNEE(S): Luxembourg  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 55043087	A	19800326	JP 1979-115646	19790907
JP 06062511	B	19940817		

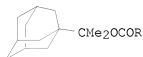
EP 10587	A1	19800514	EP 1979-103160	19790827
EP 10587	B1	19830601		
R: AT, BE, CH, DE, FR, GB, IT, NL, SE				
AT 3634	T	19830615	AT 1979-103160	19790827
JP 62246548	A	19871027	JP 1986-316102	19861226
JP 01052748	A	19890228	JP 1988-86213	19880406
JP 03017824	B	19910311		

PRIORITY APPLN. INFO.:

LU 1978-80207	A	19780907
EP 1979-103160	A	19790827
JP 1979-115646		19790907

OTHER SOURCE(S): MARPAT 93:114050

GI

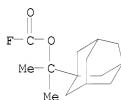


AB Adamantanepropyl esters (I; R = F, PhO, amino acid residue), useful as protective groups in peptide synthesis, were prepared. Thus, a mixture of 0.1 mol 2-(1-adamantyl)-2-propanol, 14 mL Et3N, and FCOCl containing SO3 (by reaction of 60 g 65% fuming H2SO4 with 25 mL FCCl3) in Et2O was kept at 40°. Et3N.HCl was filtered off, and the mixture degassed at 10° and 200 mm Hg to give 95% I (R = F). Similarly prepared were I (R = PhO) and 13 amino acid derivs., e.g., I (R = NHCH2CO2H).

IT 74654-74-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 74654-74-3 CAPLUS

CN Carbonofluoridic acid, 1-methyl-1-tricyclo[3.3.1.3^0]dec-1-ylethyl ester  
(CA INDEX NAME)

L10 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1978:152109 CAPLUS

DOCUMENT NUMBER: 88:152109

ORIGINAL REFERENCE NO.: 88:23957a,23960a

TITLE: Adamantyl perfluoroisobutenyl ethers

AUTHOR(S): Kryukov, L. N.; Vitkovskii, V. S.; Kryukova, L. Yu.;

Isaev, V. L.; Sterlin, R. N.; Knunyants, I. L.

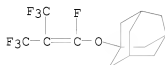
CORPORATE SOURCE: USSR

SOURCE: Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva im. D.

I. Mendeleeva (1978), 23(1), 115

CODEN: ZVKOA6; ISSN: 0373-0247

DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 AB Treating (F3C)2C:CF2 with ROH (R = 2-naphthyl, 1- and 2-adamantyl) and Na gave 33-41% (F3C)2C:CFOR.  
 IT 66258-26-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 66258-26-2 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 1-[[1,3,3,3-tetrafluoro-2-(trifluoromethyl)-1-propenyl]oxy]- (9CI) (CA INDEX NAME)



L10 ANSWER 40 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1969:58138 CAPLUS  
 DOCUMENT NUMBER: 70:58138  
 ORIGINAL REFERENCE NO.: 70:10937a,10940a  
 TITLE: 1-Adamantyl- and 1-adamantylmethyl carbonates of testosterone  
 INVENTOR(S): Boswell, George A., Jr.  
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.  
 SOURCE: S. African, 27 pp.  
 CODEN: SFXXAB  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ZA 6706588		19680308	ZA	
DE 1668559			DE	
FR 1579481			FR	
FR 7327			FR	
GB 1187611			GB	
GB 1187659			GB	
GB 1187660			GB	
US 3433813		19690318	US	19661129
PRIORITY APPLN. INFO.:			US	19661129
OTHER SOURCE(S):	MARPAT	70:58138		

AB Anabolic-androgenic agents were prepared 19-Nortestosterone (25.0 g.) in 100 cc. CH<sub>2</sub>Cl<sub>2</sub> was shaken with 75 g. carbonyl fluoride under pressure 10 hrs. at 20 ± 2° to give 23.4 g. 19-nortestosterone fluoroformate (I), m. 83-3.5°; [α]<sub>D</sub><sup>25</sup> 34° (c 1.47, CHCl<sub>3</sub>). Similarly prepared was testosterone fluoroformate, m. 104-6°, [α]<sub>D</sub><sup>25</sup> 86° (c 2.33, CHCl<sub>3</sub>). I (1.0 g.) and 10 g. 1-adamantanemethanol in 75 cc. benzene containing 0.5 cc. pyridine was refluxed under N 24 hrs. to give 0.646 g. 19-nortestosterone 1'-adamantylmethyl carbonate, m. 142.5-3.5°, [α]<sub>D</sub><sup>25</sup> 42° (c 1.65, CHCl<sub>3</sub>). Similarly prepared was testosterone 1'-adamantylmethyl carbonate, m. 158-9°.

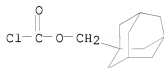
[ $\alpha$ ]24D 79° (c 1.32, CHCl<sub>3</sub>). Similarly prepared, from 1-adamantyl chloroformate (m. 52-3°; from 1-adamantol and phosgene) was 19-nortestosterone 1'-adamantyl carbonate, m. 167°, [ $\alpha$ ]24D 35° (c 1.43, CHCl<sub>3</sub>). Phosgene was bubbled through 400 cc. Et<sub>2</sub>O 2 hrs. at 0°, the solution diluted to 800 cc. with Et<sub>2</sub>O, 100 g. adamantane-1-methanol added, and the mixture stirred 24 hrs. to give 1-adamantylmethyl chloroformate (II), m. 54-5°. Testosterone (13.0 g.) in benzene was refluxed with 12 g. II and 10 cc. pyridine 40 hrs. to give 15 g. 17 $\beta$ -hydroxy-4-androsten-3-one 1'-adamantylmethyl carbonate, m. 157-8°. Ir and uv spectral data were given for the compds.

IT 21317-84-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 21317-84-0 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethyl ester (CA INDEX NAME)



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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL

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NEWS	2	OCT 02	CA/CAPLUS enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	3	OCT 19	BEILSTEIN updated with new compounds
NEWS	4	NOV 15	Derwent Indian patent publication number format enhanced
NEWS	5	NOV 19	WPIX enhanced with XML display format
NEWS	6	NOV 30	ICSD reloaded with enhancements
NEWS	7	DEC 04	LINPADOCDB now available on STN
NEWS	8	DEC 14	BEILSTEIN pricing structure to change
NEWS	9	DEC 17	USPATOLD added to additional database clusters
NEWS	10	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS	11	DEC 17	DGENE now includes more than 10 million sequences
NEWS	12	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS	13	DEC 17	MEDLINE and LMEDELINE updated with 2008 MeSH vocabulary
NEWS	14	DEC 17	CA/CAPLUS enhanced with new custom IPC display formats
NEWS	15	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS	16	JAN 02	STN pricing information for 2008 now available
NEWS	17	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	18	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	19	JAN 28	MARPAT searching enhanced
NEWS	20	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	21	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	22	JAN 28	MEDLINE and LMEDELINE reloaded with enhancements
NEWS	23	FEB 08	STN Express, Version 8.3, now available
NEWS	24	FEB 20	PCI now available as a replacement to DPCI
NEWS	25	FEB 25	IFIREF reloaded with enhancements
NEWS	26	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	27	FEB 29	WFINDEX/WFIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS EXPRESS	FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008		
NEWS HOURS	STN Operating Hours Plus Help Desk Availability		
NEWS LOGIN	Welcome Banner and News Items		
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 DICTIONARY FILE UPDATES: 3 MAR 2008 HIGHEST RN 1006431-93-1

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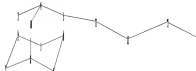
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REGISTRY includes numerically searchable data for experimental and  
 predicted properties as well as tags indicating availability of  
 experimental property data in the original document. For information  
 on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10540547\Struc 2.str



```

chain nodes :
11 12 13 14
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
5-11 11-12 12-13 13-14
ring bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10
exact/norm bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10 11-12 12-13
exact bonds :
5-11 13-14

```

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:CLASS 14:CLASS

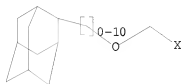
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L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

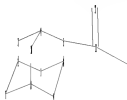
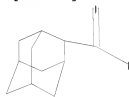
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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chain nodes :

11 12 13

ring nodes :

1 2 3 4 5 6 7 8 9 10

chain bonds :

5-11 11-12 11-13

ring bonds :

1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10

exact/norm bonds :

1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10 11-12 11-13

exact bonds :

5-11

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

11:CLASS 12:CLASS 13:CLASS

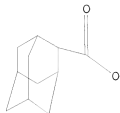
L2 STRUCTURE UPLOADED

=> d

L2 HAS NO ANSWERS

L2 STR

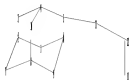
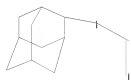




Structure attributes must be viewed using STN Express query preparation.

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chain nodes :
11 12 13
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
5-11 11-12 12-13
ring bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 6-9 7-8 8-9 8-10
exact/norm bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-10 5-6 5-11 6-9 7-8 8-9 8-10 11-12 12-13
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Match level :

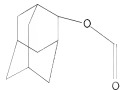
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11:CLASS 12:CLASS 13:CLASS
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L3 STRUCTURE UPLOADED

=> d

L3 HAS NO ANSWERS

L3 STR



Structure attributes must be viewed using STN Express query preparation.

=> l1 not l2 not l3

SAMPLE SEARCH INITIATED 08:38:06 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 452 TO ITERATE

100.0% PROCESSED 452 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 7765 TO 10315  
PROJECTED ANSWERS: 0 TO 0

L4 0 SEA SSS SAM L1 NOT L2 NOT L3

=> l1 not l2 not l3 full

FULL SEARCH INITIATED 08:38:12 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 9143 TO ITERATE

100.0% PROCESSED 9143 ITERATIONS 10 ANSWERS  
SEARCH TIME: 00.00.01

L5 10 SEA SSS FUL L1 NOT L2 NOT L3

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	178.36	178.57

FILE 'CAPLUS' ENTERED AT 08:38:16 ON 05 MAR 2008

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FILE COVERS 1907 - 5 Mar 2008 VOL 148 ISS 10

FILE LAST UPDATED: 3 Mar 2008 (20080303/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

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=> l5

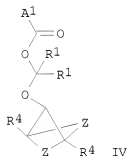
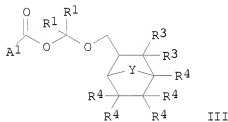
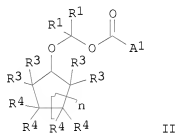
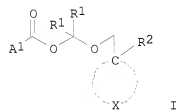
L6 23 L5

10540547.trn

=&gt; d ibib abs hitstr 1-23

L6 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2008:39211 CAPLUS  
 DOCUMENT NUMBER: 148:145183  
 TITLE: Polymerizable ester compounds, polymers for resist compositions with good sensitivity and resolution  
 INVENTOR(S): Watanabe, Takeru; Kinsho, Takeshi; Hasegawa, Koji; Tachibana, Seiichiro; Ohashi, Masaki  
 PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Japan  
 SOURCE: U.S. Pat. Appl. Publ., 55pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2008008962	A1	20080110	US 2007-822444	20070705
JP 2008013662	A	20080124	JP 2006-186297	20060706
KR 2008005105	A	20080110	KR 2007-67507	20070705
PRIORITY APPLN. INFO.: GI			JP 2006-186297	A 20060706



AB The present invention relates to polymerizable ester compds. I, II, III, and IV which undergo no acid-induced decomposition by  $\beta$ -elimination, wherein A1 = polymerizable functional group having a carbon-carbon double

bond: R1 = H or C(R5)3; R2, R3 = alkyl; R4 = H or alkyl; R5 = monovalent hydrocarbon; X = alkylene; Y = methylene, ethylene or isopropylidene; Z = alkylene; and n = 1 or 2. Thus, 128 g 1-methylcyclohexylmethanol and 36 g paraformaldehyde were reacted and further reacted with methacrylic acid to give 1-methylcyclohexylmethyl methacrylate, 13.9 g of which was polymerized with 10.4 g 3-hydroxy-1-adamantyl methacrylate and 15.7 g 3-oxo-2-oxatricyclo[4.2.1.0<sup>4,8</sup>]nonan-9-yl methacrylate in the presence of 2,2-azobis(2-methylpropanoate) at 80° for 6 h to give a copolymer with Mw 9200 and polydispersity 2.10, 80 parts of which was mixed with triphenylsulfonium nonafluorobutanesulfonate 4.4, propylene glycol monomethyl ether acetate 560, cyclohexanone 240, and a sensitivity regulator, spin-coated onto an antireflective coating-coated silicon wafer, baked at 110° for 1 min, irradiated with an excimer laser, baked at 115° for 60 s, developed, and washed to give a pattern, showing maximum resolution 70 nm and proximity bias 42 nm.

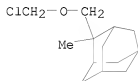
IT 1001199-75-2P

RL: IMF (Industrial manufacture); PRPH (Prophetic); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(intermediate in monomer preparation; preparation of polymerizable ester compds.,

polymers for resist compns. with good sensitivity and resolution)

RN 1001199-75-2 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-[(chloromethoxy)methyl]-2-methyl- (CA INDEX NAME)



L6 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1469801 CAPLUS

DOCUMENT NUMBER: 148:109068

TITLE: Low-molecular-weight compound for positive resist

composition and method for forming resist pattern

INVENTOR(S): Shiono, Daiju; Hirayama, Taku; Hada, Hideo

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 59pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

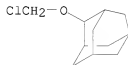
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007148456	A1	20071227	WO 2007-JP55661	20070320
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,				

RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,  
 GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM

JP 2008001604 A 20080110 JP 2006-169854 20060620  
 PRIORITY APPLN. INFO.: JP 2006-169854 A 20060620  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Compound I (A = trivalent aromatic cyclic group, alkyl group, alicyclic group, or trivalent organic group having an aromatic cyclic group or alicyclic group; R11-R17 = C1-10 alkyl or aromatic hydrocarbon group;  $g, j \geq 1$ ;  $k, q \geq 0$ ;  $g + j + k + q \leq 5$ ;  $b \geq 1$ ;  $l, m \geq 0$ ;  $b + l + m \leq 4$ ;  $c \geq 1$ ;  $n, o \geq 0$ ;  $c + n + o \leq 4$ ;  $Z =$  YCO2R; Y = alkylene, divalent aromatic hydrocarbon group, alicyclic group, divalent organic group having aromatic hydrocarbon group or alicyclic group; R = acid-cleavable dissoln.-inhibiting group) is usable for resist compns. for forming patterns with reduced line edge roughness (LER).  
 IT 177609-29-9, 2-Chloromethoxyadamantane  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of low-mol.-weight compds. for pos. resist compns. for forming resist patterns with reduced line edge roughness)  
 RN 177609-29-9 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:1059983 CAPLUS  
 DOCUMENT NUMBER: 147:374547  
 TITLE: Positive-working resist composition containing acrylic polymer having acetal-type acid decomposable solubility suppressing group and method of patterning resist  
 INVENTOR(S): Kinoshita, Yohei; Furuya, Sanae; Iwai, Takeshi; Haneda, Hideo  
 PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 48pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent

LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

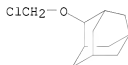
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007240718	A	20070920	JP 2006-60930	20060307
PRIORITY APPLN. INFO.:			JP 2006-60930	20060307

AB Disclosed is a pos.-working resist composition comprising a resin component capable of increasing alkali solubility upon interaction with an acid, and an acid generating agent, wherein the resin component is acrylic polymer having acetal-type acid decomposable solubility-suppressing group represented by  $[\text{CH}_2\text{-CR}(\text{COO}-(\text{CH}_2)\text{c-Yl}\{(\text{CH}_2)\text{e-OZ}\}\text{a}\{(\text{CH}_2)\text{d-OH}\}\text{b})]$  (R = H, halo, lower alkyl, etc.; Yl = aliphatic cyclyl; Z = acid-decomposable solubility-suppressing group; a = 1-3; b = 0-2; a + b = 1-3; and c, d, and e = 0-3).

IT 177609-29-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of acrylic resin component having having acetal-type acid decomposable solubility-suppressing group)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



L6 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:935060 CAPLUS  
 DOCUMENT NUMBER: 147:288278  
 TITLE: Preparation of adamantane based molecular glass photoresists for sub-200 nm immersion lithography  
 INVENTOR(S): Tanaka, Shinji; Ober, Christopher K.  
 PATENT ASSIGNEE(S): Cornell Research Foundation, Inc., USA; Idemitsu Kosan Co., Ltd.  
 SOURCE: PCT Int. Appl., 41pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007094784	A1	20070823	WO 2006-US5378	20060216
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM

## PRIORITY APPLN. INFO.:

WO 2006-US5378

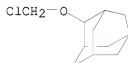
20060216

AB Disclosed are glass photoresists generated from adamantane derivs. containing acetal and/or ester moieties as novel high-performance photoresist materials. Some of the disclosed adamantane-based glass resists have a tripodal structure and other disclosed adamantane-based glass resists include one or more cholic groups. The disclosed adamantane derivs. can be synthesized from starting materials which are com. available. By way of example only, one of many disclosed amorphous glass photoresists has the following structure: GR-5 Adamantane-1,3,5-triyltris(oxyethylene) tricholate.

IT 177609-29-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of adamantane based mol. glass photoresist for immersion lithog.)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:350618 CAPLUS

DOCUMENT NUMBER: 146:368733

TITLE: Resist compounds, their production method, positive resist compositions and method for forming resist patterns

INVENTOR(S): Shiono, Daiju; Dazai, Takahiro; Hirayama, Taku; Kasai, Kohei; Hada, Hideo

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: PCI Int. Appl., 81pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007034719	A1	20070329	WO 2006-JP318151	20060913
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SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA,  
 UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM

JP 2007112777 A 20070510

JP 2008019235 A 20080131

JP 2005-320551 20051104

JP 2006-239982 20060905

JP 2005-271760 A 20050920

JP 2005-320550 A 20051104

JP 2005-320551 A 20051104

JP 2006-76270 A 20060320

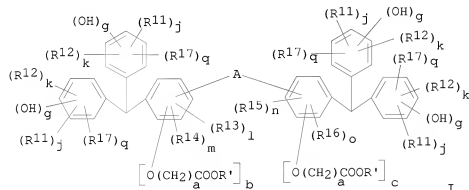
JP 2006-167263 A 20060616

JP 2006-239982 A 20060905

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 146:368733

GI



AB The resist comps. contain compds. I (A = Q; CH<sub>2</sub>, alicyclic group; R' = H, acid-cleavable dissoln. inhibiting group, where 2l of R' being an acid-cleavable dissoln. inhibiting group; R11-R19 = C1-10 alkyl or an aromatic hydrocarbon group and may include a heteroatom in the structure; g, j ≥ 1; k, q ≥ 0; g + j + k + q ≤ 5; a = 1-3; b ≥ 1; l, m ≥ 0; b + l + m ≤ 4; c ≥ 1; n, o ≥ 0; c + n + o ≤ 4; r, y, z ≥ 0; r + y + z ≤ 4). The resist comps. can form high-resol. resist patterns with improved line edge roughness (LER) by electron beam lithog. and extreme UV (EUV) lithog.

IT 177609-29-9

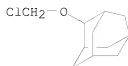
RL: RCT (Reactant); RACT (Reactant or reagent)

(pos. resist comps. for forming high-resol. resist patterns)

RN 177609-29-9 CAPLUS

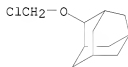
CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)





REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:93733 CAPLUS  
 DOCUMENT NUMBER: 147:344702  
 TITLE: Thermolysis of polymethacrylates for 193 nm resist  
 AUTHOR(S): Ogata, Toshiyuki; Kasai, Kohei; Matsumaru, Shogo; Takahashi, Motoki; Hada, Hideo; Shirai, Masamitsu  
 CORPORATE SOURCE: Tokyo Ohka Kogyo Co., Ltd., 1590 Tabata, Samukawa-machi, Koza-gun, Kanagawa, 253-0114, Japan  
 SOURCE: Journal of Photopolymer Science and Technology (2006), 19(6), 705-708  
 CODEN: JSTEEW; ISSN: 0914-9244  
 PUBLISHER: Technical Association of Photopolymers, Japan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Thermal desorption spectroscopic results of thermal degradation of 2-adamantyloxymethyl methacrylate- $\gamma$ -butyrolactone methacrylate copolymer and 2-methyl-2-adamantyl methacrylate- $\gamma$ -butyrolactone methacrylate copolymer films showed the thermal stability of each protecting group such as 2-adamantyl oxymethyl ester and 2-methyl-2-adamantyl ester, and is in good agreement with TGA results. The stereoregularity of these polymers affected thermal degradation process (deesterification and dehydration) of the polymer film.  
 IT 177609-29-9  
 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction with methacrylic acid)  
 RN 177609-29-9 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)

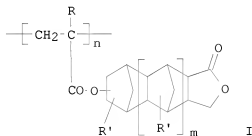


REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:1228843 CAPLUS  
 DOCUMENT NUMBER: 145:513854  
 TITLE: Positive resist composition and method of forming resist pattern  
 INVENTOR(S): Kinoshita, Yohei; Irie, Makiko; Ohkubo, Waki; Nakagawa, Yusuke; Hidesaka, Shinichi

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 49pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006123487	A1	20061123	WO 2006-JP307486	20060407
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM JP 2006323181 A 20061130 JP 2005-146859 20050519 PRIORITY APPLN. INFO.: JP 2005-146859 A 20050519 GI				

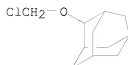


AB The resist composition can form a resist pattern of a satisfactory shape. The resist composition is obtained by dissolving in an organic solvent a resin ingredient (A) whose alkali solubility increases by the action of an acid and an acid generator ingredient (B) which generates an acid upon irradiation with a radiation, wherein the resin ingredient (A) comprises a copolymer bearing a constituent unit having an acetal-type protective group, a constituent unit I (R = H, F, lower alkyl, lower fluoroalkyl; R' = H, lower alkyl, C1-5 alkoxy; m = 0, 1) derived from an acrylic ester having a lactone-containing polycyclic group, and a constituent unit derived from an acrylic ester having a polar-group-containing aliphatic hydrocarbon group.

IT 177609-29-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (pos.-working resist comps. and method for resist pattern formation)

RN 177609-29-9 CAPLUS

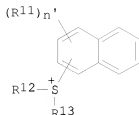
CN Tricyclo[3.3.1.1<sup>3,3</sup>.7]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:1226563 CAPLUS  
 DOCUMENT NUMBER: 145:513852  
 TITLE: Positive-working resist composition and method for resist pattern formation  
 INVENTOR(S): Kinoshita, Yohei; Ohkubo, Waki; Nakagawa, Yusuke; Hidesaka, Shinichi; Irie, Makiko  
 PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 53pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006123496	A1	20061123	WO 2006-JP308124	20060418
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006322989	A	20061130	JP 2005-143969	20050517
EP 1882981	A1	20080130	EP 2006-732052	20060418
R: DE				
KR 2007118708	A	20071217	KR 2007-727126	20071121
PRIORITY APPLN. INFO.:			JP 2005-143969	A 20050517
			WO 2006-JP308124	W 20060418
OTHER SOURCE(S):	MARPAT 145:513852			
GI				



I

AB This invention provides a pos.-working resist composition containing a resin component (A) and an acid generating agent component (B), which, upon a change in exposure, causes no significant variation in pattern size, and a method for resist pattern formation using this resist composition. Component (A) comprises a polymer comprising constitutional units containing an acetal-type protective group, acrylic ester-derived constitutional units containing a lactone-containing cyclic group, and acrylic ester-derived constitutional units containing a polar group-containing aliphatic hydrocarbon group.

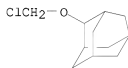
Component (B) comprises an onium salt-type acid generating agent having a cation part I [R11 = alkyl, alkoxy, halo, hydroxy; R12, R13 = (un)substituted aryl or alkyl; n' = 1-3].

IT 177609-29-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(pos.-working resist compns. and method for resist pattern formation)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1.3,7]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2006:845377 CAPLUS

DOCUMENT NUMBER: 145:281061

TITLE: Positive resist composition and method of forming resist pattern

INVENTOR(S): Kinoshita, Yohei; Hirano, Isao

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 63pp.

CODEN: PIXXD2

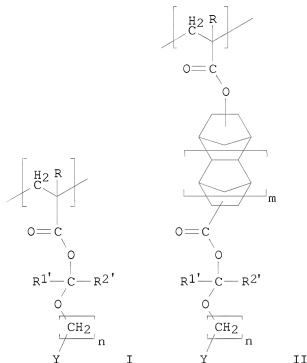
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND		DATE	APPLICATION NO.		DATE	
WO 2006087865	A1		20060824	WO 2005-JP22878		20051213	
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW						
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM						
JP 2006227160	A		20060831	JP 2005-38944		20050216	
PRIORITY APPLN. INFO.:			JP 2005-38944		A 20050216		
OTHER SOURCE(S):			MARPAT 145:281061				
GI							



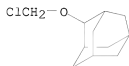
AB The invention relates to a pos. resist composition which comprises a resin ingredient (A) which comes to have enhanced alkali solubility by the action of an acid and an acid generator ingredient (B) which generates an acid upon irradiation with a radiation, wherein the ingredient (A) comprises a structural unit (a1) represented by the general formula I or II, a structural unit (a2) derived from an acrylic ester having a lactone-containing

monocyclic or polycyclic group, and a structural unit (a3) which is a structural unit other than the structural units (a1) and (a2) and is derived from an acrylic ester which contains a non-acid-dissociable dissoln.-inhibitive group having an alicyclic group and contains no polar groups, and the ingredient (B) comprises an onium salt (B1) having an anion moiety represented by the formula R41-SO3 -.

IT 177609-29-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(resin in pos. resist composition)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3</sup>,7]decane, 2-(chloromethoxy)- (CA INDEX NAME)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006/734536 CAPLUS

DOCUMENT NUMBER: 145:177268

TITLE: Positive resist composition and method for forming resist pattern

INVENTOR(S): Kinoshita, Yohei

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006077705	A1	20060727	WO 2005-JP23154	20051216
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006201239	A	20060803	JP 2005-10051	20050118
JP 2006201402	A	20060803	JP 2005-12053	20050119
PRIORITY APPLN. INFO.:			JP 2005-10051	A 20050118
			JP 2005-12053	A 20050119

OTHER SOURCE(S): MARPAT 145:177268

GI

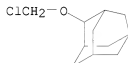
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Disclosed is a pos. resist composition having high resolution which enables to improve DOF. This composition contains a resin component (A) whose alkali solubility is increased by the action of an acid and an acid generator component (B) which generates an acid when exposed to light. The resin component (A) has at least one constitutional unit (a1) selected from those represented by the general formula I and the general formula II, and the acid generator component (B) is composed of an onium salt acid generator (B1) having a cation component represented by the general formula III or an onium salt acid generator (B4) having an anion component represented by the general formula IV or -N(-SO<sub>2</sub>-Y")(-SO<sub>2</sub>-Z"). In the formulas below, Y represents an alicyclic group; n represents 0 or an integer of 1-3; m represents 0 or 1; R represents a hydrogen atom, a lower alkyl group, a fluorine atom or a fluorinated lower alkyl group; R1 and R2 resp. represent a hydrogen atom or a lower alkyl group; R11 represents an alkyl group, an alkoxy group, a halogen atom or a hydroxyl group; R12 and R13 resp. represent an aryl group of an alkyl group; and n' represents 0 or an integer of 1-3; X" represents F-substituted C2-6 alkylene; Y" and Z" represent F-substituted C1-10 alkyl.

IT 177609-29-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(pos. resist composition)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:601730 CAPLUS

DOCUMENT NUMBER: 145:92960

TITLE: Polymer compound, positive resist composition and method for forming resist pattern

INVENTOR(S): Kinoshita, Yohei; Kurimoto, Yuko; Iwai, Takeshi

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

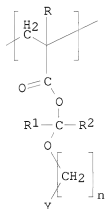
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

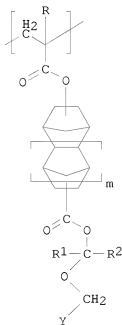
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2006064626	A1 20060622	WO 2005-JP21146	20051117
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
JP 2006169319	A 20060629	JP 2004-361399	20041214
PRIORITY APPLN. INFO.:		JP 2004-361399	A 20041214
GI			



I



II

AB The disclosed polymer has constitutional units I and II (Y = alicyclic group; n = 0, 1-3; m = 0, 1; R = H, C1-5 alkyl, F, C1-5 fluoroalkyl; R1, R2 = H, C1-5 alkyl). The polymer may also contain acrylate units with lactone-containing mono- or poly-cyclic ring and or acrylate units with polar hydrocarbyl group which does not dissociate by an acid. The disclosed photoresists contains the above polymer and a photoacid generator. The resist shows high resolution and high pattern quality.

IT 177609-29-9

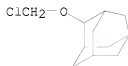
RL: RCT (Reactant); RACT (Reactant or reagent)



(esterification with methacrylic acid in preparation of polymer for photoresists)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:410214 CAPLUS

DOCUMENT NUMBER: 144:422710

TITLE: Photoacid generation type photoresist component with acid-cleavable dissolution inhibiting groups

INVENTOR(S): Shiono, Daiju; Hirayama, Taku; Ogata, Toshiyuki; Hada, Hideo

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: PCI Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006046383	A1	20060504	WO 2005-JP18143	20050930
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006267996	A	20061005	JP 2005-212904	20050722
EP 1806619	A1	20070711	EP 2005-788289	20050930
R: BE, DE, FR				
KR 2007084080	A	20070824	KR 2007-710473	20070508
PRIORITY APPLN. INFO.:			JP 2004-315601	A 20041029
			JP 2004-378248	A 20041227
			JP 2005-50722	A 20050225
			JP 2005-212904	A 20050722
			WO 2005-JP18143	W 20050930

AB Disclosed is a resist composition containing a compound obtained by substituting a

part or all of hydrogen atoms in the phenolic hydroxyl groups of a polyvalent phenolic compound (a) which has two or more phenolic hydroxyl groups and a mol. weight of 300-2500 with at least one group selected from the group consisting of acid-cleavable dissoln. inhibiting groups represented by the general formulas  $-(CH_2)_nCO_2R_1$  or  $-CHR_3OR_2$  below (wherein  $R_1$  and  $R_2$  independently represent a branched or cyclic alkyl group which may contain a heteroatom,  $R_3$  represents a hydrogen atom or a lower alkyl group, and  $n'$  represents an integer of 1-3).

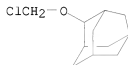
IT 177609-29-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(reactant of photoacid generation type photoresist component with acid-cleavable dissoln. inhibiting groups)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:366907 CAPLUS

DOCUMENT NUMBER: 144:422694

TITLE: Positive photoresist composition for immersion exposure and method of forming resist pattern

INVENTOR(S): Ogata, Toshiyuki; Tsuji, Hiromitsu; Matsumaru, Syogo; Hada, Hideo

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006040949	A1	20060420	WO 2005-JP18138	20050930
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

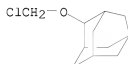
JP 2006113140 A 20060427 JP 2004-297945 20041012  
 KR 2007061862 A 20070614 KR 2007-708172 20070410  
 PRIORITY APPLN. INFO.: JP 2004-297945 A 20041012  
 WO 2005-JP18138 W 20050930

AB The invention relates to a pos. resist composition for immersion exposure which comprises a resin ingredient (A) which comes to have enhanced alkali solubility by the action of an acid and an acid generator ingredient (B) which generates an acid upon exposure to light, characterized in that the resin ingredient (A) comprises a resin (A1) which has alkali-soluble groups (i) having a hydrogen atom and in which the hydrogen atom of part of the alkali-soluble groups (i) has been replaced with an acid-dissociable dissoln.-inhibitive group (I) represented by the following general formula -C(R1)(R2)-O-(-CH2)n-Z [wherein Z represents an alicyclic group; n is an integer of 0-3; and R1 and R2 each independently represents hydrogen or C1-5 alkyl]. Composition provides high resolution patterns of good profile.

IT 177609-29-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (resin in pos. photoresist composition)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



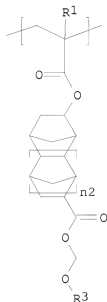
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:1354495 CAPLUS  
 DOCUMENT NUMBER: 144:97681  
 TITLE: Monomers for polymer compound, positive resist composition and method for forming resist pattern  
 Oyata, Toshiyuki; Matsumaru, Syogo; Hada, Hideo  
 INVENTOR(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 PATENT ASSIGNEE(S): PCT Int. Appl., 40 pp.  
 SOURCE: CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005123655	A1	20051229	WO 2005-JP11067	20050616
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,  
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG

JP 2006001907 A 20060105 JP 2004-182299 20040621  
 PRIORITY APPLN. INFO.: JP 2004-182299 A 20040621  
 OTHER SOURCE(S): MARPAT 144:97681  
 GI



I

AB Disclosed is a pos. resist composition with excellent resolution which enables  
 to

form a good resist pattern even when there is used an acid generator which generates a weak acid. Such a pos. resist composition contains a polymer compound having a constitutional unit (a1) represented by the general formula I and an acid generator component (B) which generates an acid when exposed to light. In the formula, R1 represents a hydrogen atom or a lower alkyl group; R3 represents an alkyl group having 1-15 carbon atoms or an alicyclic group, and may have one or more substituents selected from the group consisting of ether bonds, hydroxyl group, carbonyl groups, ester groups and amino group; and n2 represents 0 or an integer of 1-3.

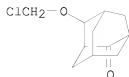
IT 720682-49-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(compound, polymer compound, pos. resist composition and method for forming resist pattern)

RN 720682-49-5 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decanone, 4-(chloromethoxy)- (9CI) (CA INDEX NAME)

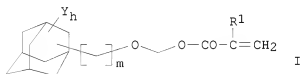


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:1241028 CAPLUS  
 DOCUMENT NUMBER: 143:485833  
 TITLE: Adamantane derivative, method for producing same and photosensitive material for photoresist  
 INVENTOR(S): Ito, Katsuki; Ono, Hidetoshi; Tanaka, Shinji; Hatakeyama, Naoyoshi; Miyamoto, Shinji; Matsumoto, Nobuaki  
 PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005111097	A1	20051124	WO 2005-JP8943	20050517
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: JP 2004-147946 A 20040518  
 OTHER SOURCE(S): MARPAT 143:485833  
 GI



AB Disclosed is an adamantane derivative which is useful as a monomer for a functional resin such as a photosensitive resin that is used in the fields

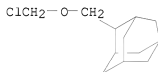
of photolithog. Also disclosed are a method for efficiently producing such an adamantane derivative and a photosensitive material for photoresists containing a polymer obtained from such an adamantane derivative. Specifically disclosed is an adamantane derivative which is characterized by having a structure represented by the following general formula I wherein R1 represents a hydrogen atom, a Me group or a trifluoromethyl group; Y represents an alkyl group having 1-10 carbon atoms, a halogen atom or a hydroxyl group, or alternatively two Ys may combine together to form =O, and a plurality of Ys may be the same as or different from one another; k represents an integer of 0-15; and m represents 0 or 1. Also specifically disclosed are a method for producing an adamantane derivative represented by the above general formula (I) which is characterized by reacting a halomethyl adamantyl (methyl) ether with a (meth)acrylic acid or an acid anhydride thereof, and a photosensitive material for photoresists containing a polymer obtained from such an adamantane derivative

IT 869726-26-1 869726-28-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(adamantane derivative for photoresist composition)

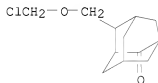
RN 869726-26-1 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-[(chloromethoxy)methyl]- (CA INDEX NAME)



RN 869726-28-3 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decanone, 4-[(chloromethoxy)methyl]- (9CI) (CA INDEX NAME)



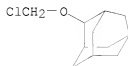
IT 177609-29-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(adamantane derivative for photoresist composition)

RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:962319 CAPLUS  
 DOCUMENT NUMBER: 143:257069  
 TITLE: Polymer compound, photoresist composition containing such polymer compound, and method for forming resist pattern  
 INVENTOR(S): Ogata, Toshiyuki; Matsumaru, Syogo; Kinoshita, Yohei; Hada, Hideo; Shiono, Daiju; Shimizu, Hiroaki; Kubota, Naotaka  
 PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 91 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005080473	A1	20050901	WO 2005-JP1228	20050128
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
JP 2006096965	A	20060413	JP 2004-316960	20041029
EP 1717261	A1	20061102	EP 2005-709454	20050128
R: DE, FR				
CN 1918217	A	20070221	CN 2005-80004964	20050128

## PRIORITY APPLN. INFO.:

JP 2004-45522 A 20040220  
 JP 2004-134585 A 20040428  
 JP 2004-179475 A 20040617  
 JP 2004-252474 A 20040831  
 JP 2004-316960 A 20041029  
 WO 2005-JP1228 W 20050128

AB Disclosed is a polymer compound which enables to obtain a highly sensitive photoresist composition which forms a fine pattern with excellent resolution and good rectangular shape and is capable of obtaining good resist characteristics even when the acid generated by an acid generator is weak. Also disclosed are a photoresist composition using such a polymer compound and a method for forming a resist pattern using such a photoresist composition. The photoresist composition and resist pattern-forming method use a polymer compound having an alkali-soluble group (i) which is at least one substituent selected from an alc. hydroxyl group, a carboxyl group and a phenolic hydroxyl group and protected by an acid-cleavable dissoln. inhibiting group (ii)

represented by general formula  $-\text{CH}_2-\text{O}-(-\text{CH}_2)_n-\text{R}_1$  wherein  $\text{R}_1$  represents an alicyclic group having 20 or less carbon atoms which may have an oxygen, nitrogen, sulfur or halogen atom; and  $n$  represents 0 or an integer of 1-5.

IT 177609-29-9P 720682-49-5P

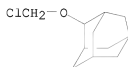
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(polymer compound, photoresist composition containing such polymer compound, and

method for forming resist pattern)

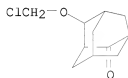
RN 177609-29-9 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



RN 720682-49-5 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decanone, 4-(chloromethoxy)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:565183 CAPLUS

DOCUMENT NUMBER: 141:107948

TITLE: Adamantane derivatives and process for producing them

INVENTOR(S): Tanaka, Shinji; Ono, Hidetoshi; Kodoi, Kouichi;

Hatakeyama, Naoyoshi

PATENT ASSIGNEE(S): Idemitsu Petrochemical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

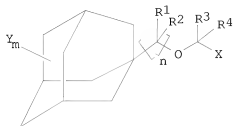
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

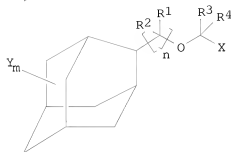
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004058675	A1	20040715	WO 2003-JP16258	20031218
W: KR, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
JP 2004217627	A	20040805	JP 2003-414445	20031212
EP 1577285	A1	20050921	EP 2003-780891	20031218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				



IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK  
 US 2006149073 A1 20060706 US 2005-540547 20051213  
 PRIORITY APPLN. INFO.: JP 2002-374659 A 20021225  
 WO 2003-JP16258 W 20031218  
 OTHER SOURCE(S): MARPAT 141:107948  
 GI



I



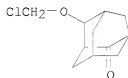
II

AB Compds. I and II (R1-R4 = H, halo, C1-10 alkyl, C1-10 haloalkyl; X = halo; Y = C1-10 alkyl, C1-10 haloalkyl, halo, heteroatom-containing group; m = 0-15; n = 0-10; wherein in I, the case where both of m and n are 0 and both of R3 and R4 are H is excluded; in I and II, two Y groups may form :O group), such as chloromethyl adamantylmethyl ether and chloromethyl 4-oxo-2-adamantyl ether, are prepared. The adamantane derivs. are useful as modifiers for photoresist resins in the field of photolithog., dry-etching resistance improvers, intermediates for agricultural chems. and medicines, and other various industrial products.

IT 720682-49-5P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of adamantane derivs.)

RN 720682-49-5 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decanone, 4-(chloromethoxy)- (9CI) (CA INDEX NAME)

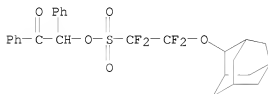


L6 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:793943 CAPLUS  
 DOCUMENT NUMBER: 137:317924  
 TITLE: Perfluoroalkylsulfonic acid compounds for photoresists  
 INVENTOR(S): Ferreira, Lawrence; Blakeney, Andrew J.; Spaziano,  
 Gregory Dominic; Dimov, Ognian; Kocab, Thomas J.;  
 Hatfield, John F.  
 PATENT ASSIGNEE(S): Arch Specialty Chemicals, Inc., USA  
 SOURCE: PCT Int. Appl., 81 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002082185	A1	20021017	WO 2002-US10800	20020405
W: JP, KR, SG				
RW: AT, BE, CH, PT, SE, TR	CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,			
US 2002197558	A1	20021226	US 2002-117693	20020405
US 6855476	B2	20050215		
EP 1299774	A1	20030409	EP 2002-725542	20020405
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
JP 2004519520	T	20040702	JP 2002-579891	20020405
TW 275905	B	20070311	TW 2002-91106973	20020408
PRIORITY APPLN. INFO.:			US 2001-281652P	P 20010405
			WO 2002-US10800	W 20020405

OTHER SOURCE(S): MARPAT 137:317924

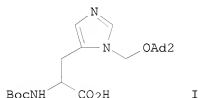
- AB The present invention relates to a photoacid compound that produce a fluorinated alkyl sulfonic acid having a short perfluoroalkyl chain attached to an ether linkage. The invention photoacid has general structure: R-O(CF<sub>2</sub>)<sub>n</sub>SO<sub>3</sub>X (n = 1-4; R = C1-C12 alkyl or alkenyl, aralkyl, aryl, bicycloalkyl, tricycloalkyl, H, alkyl sulfonic acid, perfluoroalkyl, general structure F((CF<sub>2</sub>)pO)m(CF<sub>2</sub>)q-; p = 1-4; m = 0-3; q = 1-4; etc.; X = organic cations and covalently bonded organic radicals). The present invention relates photoresist compn comprising such photoacid generator compound
- IT 470701-80-5  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (photoacid for photoresists composition and photolithog.)
- RN 470701-80-5 CAPLUS
- CN Ethanesulfonic acid, 1,1,2,2-tetrafluoro-2-(tricyclo[3.3.1.1.3,7]dec-2-yloxy)-, 2-oxo-1,2-diphenylethyl ester (CA INDEX NAME)



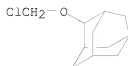
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS

## RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1997:213304 CAPLUS  
 DOCUMENT NUMBER: 126:305766  
 TITLE: Amino acids and peptides. L. Development of a novel  
 $N\pi$ -protecting group for histidine,  
 $N\pi$ -2-adamantyloxymethylhistidine, and its  
 application to peptide synthesis  
 AUTHOR(S): Okada, Yoshio; Wang, Jidong; Yamamoto, Takeshi; Yokoi,  
 Toshio; Mu, Yu  
 CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Kobe Gakuin  
 University, Kobe, 651-21, Japan  
 SOURCE: Chemical & Pharmaceutical Bulletin (1997), 45(3),  
 452-456  
 CODEN: CPBTAL; ISSN: 0009-2363  
 PUBLISHER: Pharmaceutical Society of Japan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

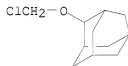


AB  $N\alpha$ -tert-butyloxycarbonyl- $N\pi$ -adamantyloxymethylhistidine,  
 Boc-His( $N\pi$ -2-Adom)-OH (I), was prepared by the reaction of  
 Boc-His( $N\pi$ -Boc)-OMe with 2-adamantyloxymethyl chloride (2-Adom-Cl)  
 followed by saponification. The 2-Adom group was stable to TFA, 1 N NaOH and  
 20% piperidine/DMF and was easily removed by 1 M trifluoromethanesulfonic  
 acid-thioanisole/TFA and HF. This new protecting group suppressed  
 racemization during peptide synthesis and exhibited high solubility in organic  
 solvents. It was applied to the synthesis of TSH-releasing hormone (TRH)  
 using both solution and solid-phase methods. The 2-Adom group can be used  
 for peptide synthesis in combination with the Boc group as the  
 $N\alpha$ -protecting group in both solution and solid-phase methods.  
 IT 177609-29-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (adamantyloxymethyl as a protecting group for imidazole  $\pi$ -N of  
 histidine)  
 RN 177609-29-9 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)



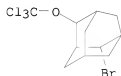
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:257355 CAPLUS  
 DOCUMENT NUMBER: 125:34138  
 TITLE: Synthesis of N $\pi$ -2-adamantyloxymethylhistidine, His(N $\pi$ -2-Adom), and its evaluation for peptide synthesis  
 AUTHOR(S): Okada, Yoshio; Wang, Jidong; Yamamoto, Takeshi; Mu, Yu  
 CORPORATE SOURCE: Faculty Pharmaceutical Sciences, Kobe Gakuin Univ., Kobe, 651-21, Japan  
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1996), (8), 753-4  
 CODEN: JCPRB4; ISSN: 0300-922X  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 125:34138  
 AB N $\pi$ -2-Adamantyloxymethylhistidine, His(N $\pi$ -2-Adom), is prepared and successfully applied to the synthesis of TSH-releasing hormone (TRH) in combination with tert-butyloxycarbonyl (Boc) as the Na-protecting group. This new protecting group suppressed racemization during peptide synthesis and exhibited high solubility in organic solvents.  
 IT 177609-29-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and peptide coupling reactions of protected (adamantyloxymethyl)histidine)  
 RN 177609-29-9 CAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-(chloromethoxy)- (CA INDEX NAME)

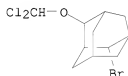


L6 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:127040 CAPLUS  
 DOCUMENT NUMBER: 124:246220  
 TITLE: Photochemical reactions of some mono- and diketo derivatives of adamantane in different solvents  
 AUTHOR(S): Rykov, S. V.; Skakovskii, E. D.; Oppengeim, V. D.; Bagrii, E. I.; Filatova, M. P.

CORPORATE SOURCE: A. V. Topchiev Inst. Petrochemical Synthesis, Russian Academy Sci., Moscow, 117912, Russia  
 SOURCE: Izvestiya Akademii Nauk, Seriya Khimicheskaya (1995), (9), 1833-5  
 CODEN: IASKEA  
 PUBLISHER: Institut Organicheskoi Khimii im. N. D. Zelinskogo Rossiiskoi Akademii Nauk  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 OTHER SOURCE(S): CASREACT 124:246220  
 AB Adamantanes are photoactive in the presence of CCl<sub>4</sub> and CDCl<sub>3</sub>. The mechanism of photolysis suggested to include the formation of singlet- or triplet-excited donor-acceptor complexes.  
 IT 174972-28-2 174972-29-3  
 RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative) (photochem. reactions of mono- and diketo adamantane derivs. in presence of carbon tetrachloride)  
 RN 174972-28-2 CAPLUS  
 CN Tricyclo[3.3.1.1.3,7]decane, 2-bromo-4-(trichloromethoxy)- (CA INDEX NAME)



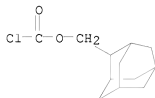
RN 174972-29-3 CAPLUS  
 CN Tricyclo[3.3.1.1.13,7]decane, 2-bromo-4-(dichloromethoxy)- (CA INDEX NAME)



L6 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1985:422197 CAPLUS  
 DOCUMENT NUMBER: 103:22197  
 ORIGINAL REFERENCE NO.: 103:3651a,3654a  
 TITLE: Adamantane-type carbamates  
 AUTHOR(S): Novikova, M. I.; Kozlov, O. F.  
 CORPORATE SOURCE: USSR  
 SOURCE: Vestn. Kiev. Politekhn. In-ta. Khim. Mashinostr. i Tekhnol. (1984), (21), 6-9  
 From: Ref. Zh., Khim. 1985, Abstr. No. 2Zh144  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 OTHER SOURCE(S): CASREACT 103:22197  
 AB Title only translated.  
 IT 97042-08-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with amines, carbamates by)

RN 97042-08-5 CAPLUS

CN Carbonochloridic acid, tricyclo[3.3.1.1<sup>3,7</sup>]dec-2-ylmethyl ester (CA INDEX NAME)

L6 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1978:152109 CAPLUS

DOCUMENT NUMBER: 88:152109

ORIGINAL REFERENCE NO.: 88:23957a,23960a

TITLE: Adamantyl perfluoroisobutenyl ethers

AUTHOR(S): Kryukov, L. N.; Vitkovskii, V. S.; Kryukova, L. Yu.;

Isaev, V. L.; Sterlin, R. N.; Knunyants, I. L.

CORPORATE SOURCE: USSR

SOURCE: Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva im. D.

I. Mendeleeva (1978), 23(1), 115

CODEN: ZVKOA6; ISSN: 0373-0247

DOCUMENT TYPE: Journal

LANGUAGE: Russian

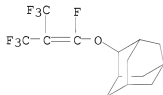
AB Treating (F3C)2C:CF2 with ROH (R = 2-naphthyl, 1- and 2-adamantyl) and Na gave 33-41% (F3C)2C:CFOR.

IT 66258-27-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 66258-27-3 CAPLUS

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane, 2-[[1,3,3,3-tetrafluoro-2-(trifluoromethyl)-1-propenyl]oxy]- (9CI) (CA INDEX NAME)

=&gt; log y

COST IN U.S. DOLLARS

SINCE FILE TOTAL  
ENTRY SESSION

FULL ESTIMATED COST

125.83 304.40

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL  
ENTRY SESSION

Page 355

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-18.40

-18.40

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